DECEPTION DEMONSTRATION AND DEBATE

Toward a critical environment and development education

Edited by John Abraham, Colin Lacey and Roy Williams.

Misc. 1544 25.9.90

h 9:95

DECEPTION, DEMONSTRATION AND DEBATE

C/

DECEPTION, DEMONSTRATION AND DEBATE

Toward a Critical Environment and Development Education

Edited by

John Abraham, Colin Lacey and Roy Williams

WWF

KOGAN PAGE

S.C.R.E.R.T., West Bengal
Library
Calcutta
25/3, B. L. Road

WWF are delighted that Pampers (a Procter and Gamble product) are sponsoring the Education Network project.

Cover design by Tom Eckersley.

© The World Wide Fund for Nature and named contributors, 1990

All rights reserved. No reproduction, copy, or transmission of this publication may be made without written permission.

No paragraph of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright Act 1956 (as amended), or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, 7 Ridgmount Street, London WC1E 7AE.

Any person who does any unauthorised act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

371.33
DEC

Co-published in 1990 by the World Wide Fund for Nature and Kogan Page Ltd,
120 Pentonville Rd, London N1 9JN

Typeset by DP Photosetting, Aylesbury, Bucks
Printed and bound in Great Britain by
Richard Clay, The Chaucer Press, Bungay

British Library Cataloguing in Publication Data

A CIP catalogue record for this book is available from the British Library.

ISBN 0-7494-0198-2

N.C.E.R.T., West Bengal
Date 27.2.91
Acc. No. 4914

CONTENTS

Preface 7
List of Contributors 9
Introduction 13
John Abraham and Colin Lacey

SECTION ONE

Introduction to Section One 29

1. **Agribusiness and its Effects on Developing Countries** 33
Barbara Dinham
2. **Television and the Ethopian Famine** 43
Greg Philo and Robert Lamb
3. **Critical Film Analysis as Environment and Development Education** 63
Alan Jenkins
4. **Eating Television? Children, Food and the Media** 81
Anne Karpf
5. **Advertising and Young People** 89
Gerard Hastings

SECTION TWO

Introduction to Section Two 101

6. **The Need for Concentropic Education** 105
Robin Jenkins

7. **Environment, Development, Education – Towards an Holistic View** 119
Stephen Sterling
8. **Development Education: A Radical Dimension of Education?** 133
Anthony Hopkin
9. **Classroom Approaches to Environment and Development Education** 151
Annette Beard
10. **Broadcasting and World Studies – Contradictions in the System?** 165
Paul Gerhardt
11. **Teaching and Learning with Media** 173
Maurice Plaskow
12. **The Quality of Primary Education in Developing Countries: from critique to possibility** 179
David Stephens

Conclusions 193
John Abraham and Colin Lacey

PREFACE

This book is derived from a series of six seminars organised by the editors between 1987 and 1989 at the University of Sussex as part of the development of the Education Network for Environment and Development (ENED). The purpose of ENED is to raise awareness about environment and development issues through education in the broadest sense of the term, and to do so across a number of institutions and professional areas.

To this end the seminars pursued three cross-institutional topics (two seminars for each), namely, 'Media and Education', 'Political Economy and Education', 'Schooling and Teacher Education'. Out of the presentations and discussions over the two years emerged two key areas of concern. These related to the development of a critical and constructive intelligence which will be required to acknowledge and tackle the global destructive tendencies now facing humanity. The first was that education should confront directly the problem of deception about environment and development issues in our society and thereby take account of how and why such deception is, or fails to be, demonstrated and debated in the public sphere. The second was that a critical evaluation of the potential of schools, teacher education, and the media, to address the need for consciousness raising about environment and development issues, was required. Thus section one of this book is concerned with understanding the structure of public debate and section two with the part institutions with the power to educate can play.

This book is by no mean a comprehensive last word on these two areas. It is, rather, a start to a process of deepening the extent to which various institutions will critically evaluate their practices in relation to the massive problems of development and the environment.

We are grateful to our colleagues at the Education Network for Environment and Development for their assistance in the produc-

tion of this book and to all the participants of the six Network seminars. Special thanks to Ian Bride for his production of figure 1 in the Introduction and comments on the introductory chapter, and to Mary Hoar for typing various sections of the book. Thanks are also due to the World Wide Fund for Nature for supporting the six seminars out of which this book grew.

LIST OF CONTRIBUTORS

John Abraham is Tutor of Food and Society at the University of Sussex where he has taught about food and development issues for the last five years. He previously researched in areas such as food additive control and the social processes of schooling and is co-author of *Food Additives: A Guide for Everyone* (Penguin, 1988). He is currently a Research Fellow at the Education Network for Environment and Development in the University of Sussex where he is studying some educational implications of television and how these relate to production.

Annette Beard based her chapter on her work as Head of the Lower School Humanities Department at Beacon School, Crowborough. From January 1990 she will be head of the Humanities Curriculum Area at Patcham High School, Brighton. She is actively involved in several organisations which reflect her interest in curriculum development and developmental and environmental education.

Barbara Dinham is a researcher and writer who looks at the activities of multinational corporations, and their role in the economies of Third World countries, their global strategies, and their record on labour, the environment and justice. She has mainly written on the agribusiness, food and pesticide industries.

Paul Gerhardt is the Network Education Officer for Thames Television. He is a Doctor of Philosophy (Oxford University) in international relations and was at one time a Tutor Organiser for the Workers' Educational Association. Between 1982 and 1987 he was an Education Officer and then Deputy Director of the International Broadcasting Trust.

Gerard Hastings is Director of the Advertising Research Unit at the University of Strathclyde. The Unit specialises in theoretical and applied advertising research. Theoretical research is carried out into the (unintended) effects of commercial advertising and applied research on behalf of social and health organisations such as the Scottish Health Education Group (SHEG) and the Family Planning Association (FPA), to help them produce more effective advertising. He worked in government and industry before joining the University. He has a PhD in Marketing and his particular research interests are in social marketing and business ethics. He has published widely in such journals as the British Medical Journal, the Health Education Journal and the Journal of Advertising.

Anthony Gethin Hopkin was born in Bridgend, Wales. He graduated from LSE; holds a Masters and Doctorate from the London Institute of Education, and his speciality is education in developing countries. He has undertaken School and University teaching in foreign parts - England, East and West Africa, South Pacific, Australasia and the Americas. He is currently a Senior Lecturer at Cardiff University: a prior concern is promoting Development Education through teacher education.

Alan Jenkins is Principal Lecturer in Geography at Oxford Polytechnic. His research interests include media education and the representation of China in Western documentary films. He is also co-editor (with Terry Cannon) of *The Geography of Contemporary China* (Routledge, 1990).

Robin Jenkins has been an organic farmer in Portugal and Spain, an academic in Britain and Scandinavia and more recently, an officer of the GLC, during which time he set up the London Food Commission, and then worked with the ILEA where he reorganised catering. He has published in seven languages and has written *Exploitation*, a book about imperialism, *The Road to Alto*, a book about Portuguese peasants and co-authored *the Third World Atlas*. He currently works freelance from London but is itching to get back to the land.

Anne Karpf is a journalist, critic and medical sociologist and contributes regularly to the *Guardian*, *Observer*, *The Listener* and other publications. She is the author of *Doctoring the Media: the reporting of health and medicine* (Routledge).

Colin Lacey is Professor of Education at the University of Sussex. He started his teaching career as a science teacher in a London

Comprehensive school. After returning to Manchester University to read for a PhD in Sociology he has specialized in research into education. He is author of *Hightown Grammar* (Manchester University Press, 1970) and *The Socialisation of Teachers* (Methuen, 1978) and co-editor of *Education, Ecology and Development* (Kogan Page, 1987). He is also co-director of the Education Network for Environment and Development at the University of Sussex. His interest in ecology and development stems from his political interest in world systems and visits to Third World countries.

Robert Lamb is Director of the Television Trust for the Environment and Senior Editorial Policy Adviser to UNEP. He has worked in television and environmental advocacy for over ten years. Prior to becoming Director of TVE, he worked as a reporter and researcher for ATV, as Features Editor at Earthscan, and Communications Director at the IUCN.

Greg Philo is Research Director at the Glasgow University Media Unit. He is author of *Seeing and Believing* (Routledge, 1990) and *Bad News* (Routledge, 1976) and *War and Peace News* (Open University Press, 1985) with the Glasgow University Media Group.

Maurice Plaskow began his career in teaching. He then went to the BBC as an Education Officer. From 1967–79 he worked with Lawrence Stenhouse on the Humanities Project. He then moved to the Schools Council, where he was a Curriculum Officer until the Council closed in 1984. Subsequently he has been engaged as an education consultant, and is also involved in producing INSET videos with Focus in Education.

David Stephens is a lecturer in education at Sussex University where his teaching and research and consultancy interests are concerned with curriculum development, teacher education and language development, particularly in the context of developing countries. His publications include *Education and Society in Africa* (Edward Arnold, 1986) and the forthcoming *Questions of Quality: Primary education and development* (with Hugh Hawes, Longman, 1990).

Stephen Sterling is a consultant in environmental education. A former teacher and Assistant Director of the Council for Environmental Education, he has been involved in the growing interface between environment, development, education and holistic philosophy. An author of many papers on these areas, including a contribution to *Ethics of Environment and*

Development (Belhaven, 1989), his current positions include Executive Editor of the *Annual Review of Environmental Education* and membership of the Global Education Network steering committee, and IUCN (World Conservation Union) Ethics Working Group.

Roy Williams is a Senior Research Fellow in the Institute of Education, University of Sussex, working mainly in the field of environmental and development education. He has been involved with several curriculum projects for the World Wide Fund for Nature and UNICEF. His publications include *The Global Environmental Education Programme* (WWF/Richmond, 1986), *Children and World Development* (UNICEF/Richmond, 1987), *One Earth, Many Worlds* (WWF/Richmond, 1989) and co-editor of *Education, Ecology and Development* (Kogan Page, 1987). He is currently the co-director of the Education Network for Environment and Development at the University of Sussex.

INTRODUCTION

John Abraham and Colin Lacey

The Accumulation of Global Problems

Human societies have always faced uncertain futures. However this uncertainty has now come to be recognized as existing at the global level. The first realisation of the seriousness of our position is beginning to penetrate the consciousness of the average citizen. The symptoms of a deep global malaise are increasingly reported in daily newspapers and are becoming part of the everyday experience of many people. It would appear as if everything started to go wrong within the last five to ten years. Up until then, distressing natural calamities and large-scale social destruction had taken place, but events had always seemed to be somehow unfortunate, temporary episodes in the decades of material progress following the Second World War. An even higher standard of living had come to be regarded as almost a natural right of humankind; certainly for the developed countries of the First World. It was confidently expected that the countries of the Third World would share in this increased prosperity as they overcame the initial problems of 'backwardness' in traditional societies and of early economic mismanagement. (Rostow, 1966). The idea of 'development' seemed a solid reality, not just an expectation for the fortunate few.

The events of the last five to ten years have severely undermined this view of the world. The early precursors of this present period of uncertainty are easily recalled. The 'oil crisis' disturbed a period of prolonged economic growth, and pollution from pesticides and radioactivity cast a shadow over the optimistic and pervasive 'technocratic ideology' that science and scientific expertise could be relied upon to solve our problems with nature (Habermas, 1972). Despite the doubts raised by these events they were easily accommodated as 'one-off' occurrences of a substantial but temporary nature and critiques of technocratic development, such as Prebisch (1968) and Schumacher (1973), were marginalised as 'radical'. Since the

1970s however, the oil crisis has been followed by a series of escalating sub-crises culminating in the massive indebtedness of Third World countries, declining economies in most of Africa and South America and an increasing polarisation of wealth and quality of life between and within national economies. (George, 1988; Clark, 1985:159; Buckingham and Milner, 1989; Buckingham, 1989; Brindle, 1989; Wintour, 1989). Moreover, it is now undeniable that, despite the promises at the 1974 World Food Conference, the technocratic model of development has failed to reduce the most basic of development needs, namely hunger, for almost half of the world's population (George, 1985). In a similar way the early warnings of pollution have multiplied and expanded until they now include the probability of massive, rapid climatic change, the flooding of major coastal cities around the world, the destruction of the ozone layer, increasing amounts of acid rain, and pollution of the seas and drinking water. It is predicted that, within the lifetime of children presently being educated, these accumulating problems will cause the destruction of habitats, increases in cancer on a global scale, the extinction of major species and other events which will cause a massive disruption of human life.

Thus the 'temporary episode' theory of natural and social disaster does not fit the facts. We are experiencing the destructive trends that are produced by and are an integral part of the successful expanding civilization that we have created to fulfil our material desires. We are faced with a cruel dilemma that many of the material things we want most bring with them natural and social calamities we want least. In his discussion of the experience of modernity, Berman (1983: 102) characterises this 'innovative self-destruction' as:

> the theme of insatiable desires and drives, permanent revolution, infinite development, perpetual creation and renewal of every sphere of life; and its radical antithesis, the theme of nihilism, insatiable destruction, the shattering and swallowing up of life, the heart of darkness, the horror.

A few examples will illustrate the deep-seated nature of this dilemma. The cheap production of massive quantities of electricity has been an essential ingredient in the expansion of modern industrial society. In the early post-war years it was known as the 'clean fuel' and atomic power stations promised clean, plentiful supplies; as cheap as tap water. We now know that this was an illusion. Power generation contributes to global warming, through the Greenhouse Effect; to acid rain, through sulphurous emissions; to radioactive contamination, through accidents like Chernobyl and the persistent problem of waste disposal; to the proliferation of military nuclear weapons through the spread of nuclear technology and to the prospect of substantial costs in cleaning and remedying the damage already done. At the same time as First World countries

are beginning to count the future costs and propose regulation and containment of power generation, the Third World countries, particularly India and China, are planning a large expansion of 'dirty' technologies; in particular, the exploitation of their fossil fuel reserves for the purpose of power production.

The Intractable Nature of Global Problems

In a system of competing national economies, where some are already enormously wealthy, it will be very difficult for the rich to suggest expensive remedies for pollution from power stations which will slow down or deny the poor countries the rapid economic expansion already experienced by the rich.

This problem of inequality and markedly different perspectives on regulation was first met in a concrete form when the nations of the world met in Montreal in 1987 to reduce and phase out the manufacture and use of Chlorofluorocarbons (CFCs) (Gribbin, 1988). It proved relatively easy to persuade the developed world to agree to limit manufacture but impossible to move the Chinese and Indian delegations who pointed out that their industries had recently planned a large increase in the manufacture of refrigerators. In order to obtain their agreement they would require technical and financial aid to ensure a cheap, efficient substitute for CFCs which would allow their development to proceed. This request was not considered seriously by the First World countries so it is likely that despite an agreement, celebrated as a great success, the conference will fail to prevent the large-scale manufacture of CFCs. This pattern is likely to be repeated as other much more difficult issues are broached. There is already a pressing need to achieve agreements about carbon dioxide, polychlorinated biphenals (PCBs), sulphur emissions, automobile emissions, heavy metals and the destruction of toxic waste.

The reasons for this impasse are very clear. The agreements would entail a large-scale transfer of resources from the First World (rich) to the Third World (poor). The transfer of resources would involve a flow of capital and technical knowhow and substantially reduce the present advantages enjoyed by the First World. At the present time, First World governments believe, perhaps correctly, that their electorates would not agree to forego increases in their immediate living standards in favour of Third World countries, even though it is in their own long-term interests. The reasons for this are deeply imbedded in the structures and cultures of capitalist countries. The powerful institutions and institutional cultures of these countries are based on highly individualistic, competitive philosophies which seek to gain maximum advantage at the expense of other competitors whether individuals or institutions. As these institutions,

multinationals, government departments and agencies have increased in size and power First World citizens have become increasingly encapsulated within their institutional cultures. It follows that, at a time when new truths need to be understood and new levels of interdependency need to be realised, the individual citizen is bound into a system of beliefs that Galbraith (1989) has called 'institutional truth':

> Institutional truth in our times bears no necessary relationship to simple truth. It is instead, what serves the needs and purposes of the large and socially pervasive institutions that increasingly dominate modern life.

At a time when individuals need to be free to confront new and frightening problems, they find themselves cocooned within large, seemingly benevolent institutions which themselves contribute to the problem to be solved (Haytor and Watson, 1985). Many have already shown that they will resist any attempts to solve global problems if such attempts infringe upon their freedoms and their short-term institutional interest. Within the highly competitive markets in which they operate it is exceedingly difficult to put the long term collective interest before the short-term institutional ones. It will be necessary to transform many areas of production that are currently open to competition and to the destructive exploitation of the environment into areas where competition is restricted and cooperation in protecting the environment and the development needs of Third World peoples are a major concern. The problems involved in preventing the hunting of whales (an activity directly related to the decimation and extinction of major species), demonstrate just how difficult this will be in areas of activity which are linked more indirectly to environmental damage.

Hopeful Developments for an Uncertain Future

Described in this way the future looks exceedingly bleak. Humankind, faced with many destructive problems, finds it difficult to respond except by using many of the 'truths' within institutional cultures built up and developed over the years in the process of solving past problems of production, distribution and social regulation. Yet we do not take a defeatist view. We believe that to do so would be to totally underestimate the flexibility and creativeness of human intelligence and culture. Humankind has a critical intelligence that can be brought to bear on these problems. As Galbraith (1989) has pointed out: there is a choice, 'Your real choice will be guided by sometimes inconvenient, even painful reality or by ... institutional truth'.

There is growing evidence that large numbers of people are not prepared to neglect reality. Organisations such as Greenpeace and

the World Wide Fund for Nature, or Oxfam and Survival International, are united in their concern for the problems we have been describing. New institutions have emerged specifically to bring attention to these problems and to possible solutions. Individuals have broken free from institutional truth. Researchers in universities, polytechnics and research institutes are, at an individual level, increasingly drawn to investigate real problems of the environment and development. Teachers in schools have informed themselves of the problems relating to the environment and development and have pursued ways of informing their pupils. Perhaps most spectacularly, programme makers and newspaper reporters have provided an expanding and highly informative coverage of events relating to pollution and the problems of the Third World. The Education Network, out of which this book has grown, has been formed to strengthen and link these efforts (Lacey and Williams, 1987). It has been founded in the belief that education should play a transforming role in the creation of a new generation, equipped with new skills and prepared to assimilate and act on the emerging information about a rapidly changing future. In short, they must be equipped with a new intelligence. It is an intelligence that we can only just begin to define and create. The process of creation must start now by accurately and openly diagnosing the problems. This will entail breaking open the complex interests and deceptions within institutional truth. This educational process will need to take place within and between powerful institutions. To do this individuals need to have the freedom and confidence to break free from the constraints of the institutions which partly control them. The Network is therefore dedicated to widening and opening the debate so that an increasing number of people have a full grasp of the real nature of the problems we face. No topic should be regarded as too delicate or too risky for debate. No point of view that arises from a legitimate interest in these major problems should be neglected. No institution should feel above this process or exempt from scrutiny. Only by dedicating ourselves to a full debate of the deepest issues will the new intelligence which is required to transform our society emerge. This volume is intended as a contribution to widening and continuing this debate.

Deception

There is a sense in which the thesis underlying this book is that 'deception' forms an integral part of our everyday life. This is not to say that all deception is intentional or that all the levels at which it occurs are of equal importance. In this volume, we are interested in deception at the level of institutions and large-scale social processes. We are not interested in the deceptions practised by individuals unless the individual represents or acts on behalf of a major

institution. We are, however, interested in both intentional and unintentional deception. This stems from the fact that whatever the state of knowledge or intention with respect to a specific act the effects of that act will be the same. The unintentional poisoning of a river will kill the fish as effectively as the intentional introduction of poison.

We define deception as carrying out a process (physical or social) that is described/intended to have certain beneficial effects but which either does not result in these benefits or also produces adverse effects which outweigh the promised beneficial effects. Some deceptions, once revealed, are simple and clear. When a British-backed consortium's secret plans to build a giant waste disposal plant in Morocco were exposed by a British newspaper it was also revealed that the plans to dispose of toxic and explosive waste had been hidden from King Hassan. The consortium's explanation that the word 'toxic' had been lost in translation was hardly credible and the plans for the plant were rejected. However, most cases are not nearly so simple or quickly resolved. Asbestos was known to be connected with lung disease as a result of studies carried out before the Second World War. Yet it was not until the 1970s and 80s that effective measures were taken to remove asbestos from public buildings and safeguard workers who work with the material. In the meantime, hundreds of people had died from asbestosis. Factories producing the substance have now largely closed down or moved to countries in the Third World where they are able to maintain the deception.

Other issues are even more complex. The emissions from motor car engines are now known to be connected to global warming and the more local effect of acid rain. The apparently obvious solution to this problem is to cut motor car emissions either by developing the 'lean burn' engine or by enforcing the use of catalytic converters; although it must be noted that only the lean burn engine substantially reduces CO^2 emissions. However, the apparently obvious solution overlooks two less obvious issues. First, the potential expansion of car production both in Europe and in Asia within the next few decades is likely to be more effective in increasing emissions than technical innovation can be in reducing them (Ferguson and Whiston, 1983). Secondly, the fundamental problem is transport, not the motor car. Reframing the problem in this way could reveal solutions that are less dependent on the motor car and switch resources to public transport systems which are less polluting. However, this option depends on the ability of relatively powerless individuals and organisations to challenge the prevalent, institutional truth about the supposedly unalterable need for more motor cars. This leads us to consider how demonstration can lead to a challenge and perhaps an uncovering of deception.

Demonstration

Uncovering deception is an extremely varied task. It can range from making the discovery that increasing aerosol use is destroying the ozone layer (in which the effects are diffuse and widespread, and often unintentional), to highly specific acts in which the effects are well known but covertly sanctioned and protected within an organisation. Deception of the first kind is most likely to be uncovered by the scientific community or environmental pressure groups acting externally to the institutions producing the damage. Deception of the second kind is more likely to be uncovered by an insider. This insider is particularly vulnerable and experience shows that at present they are likely to suffer rather than be rewarded for their services (Verrett and Carper, 1974; Adams, 1984). If deception is genuinely unintentional then demonstration is usually smooth and unchallenged. However, as demonstration proceeds it is in practice most unlikely to be unchallenged. Some powerful interests will usually be interfered with and the demonstration will be disputed, as in the case of the use of toxic pesticides by transnational companies (Weir and Shapiro, 1981; Gillespie et al, 1983). We can therefore define demonstration of deception as uncovering the deleterious effects of a physical or social process or products in a manner that is sufficiently authoritative to imply that substantial changes will be required. It is because demonstration carries with it the possibilities of changes which disturb established interests that doubt is cast on claims that the deception has been unintentional.

Debate

Once a demonstration of deception has been disputed a public debate will normally follow. This can occur in a wide variety of ways, from the pages of an obscure journal to the television screen and the headlines of the tabloid press. The debate can therefore be defined as the attempt at a public reconciliation of opposing views. Sometimes this is achieved simply by the elimination of one side of the argument, as in the case of the proposed Moroccan waste disposal plant, but more likely the debate is unresolved as the issue is widened and fresh demonstrations are made by both sides. In some such cases, when the final outcome of the debate is unchallenged, legislation is passed or regulations changed to prevent recurrence of the deleterious effects. The diagram below gives a summary of the processes we have been describing.

The diagram (fig. 1) represents an enormous simplification of a complex process. It omits explicit reference to self deception, although this issue can be discussed under cell 1(b). It also glosses over the issue of inequality and of which groups have the power to

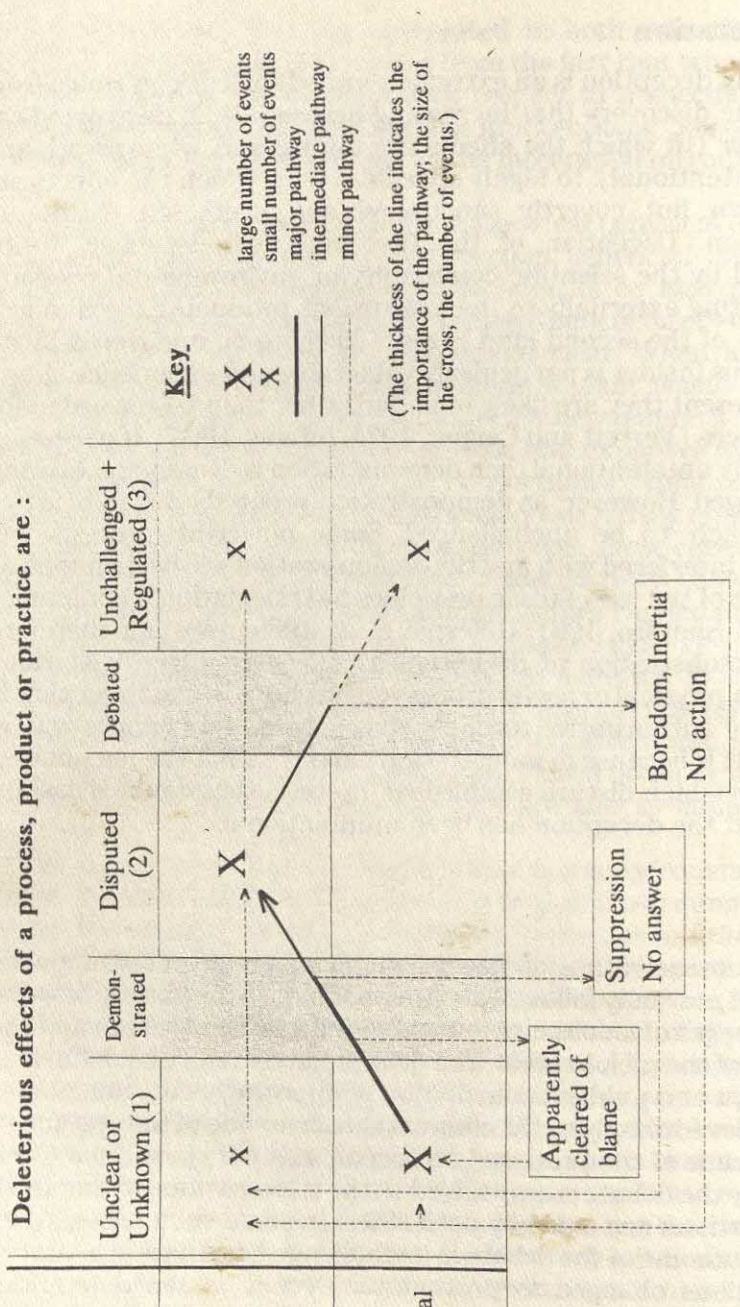


Figure 1 *The Classification of Deception and its Relationship to Demonstration and Debate*

make successful demonstrations. In particular, Timberlake (1989) has stressed the importance of freedom of information on environmental issues. Nevertheless, the strength of the diagram rests in its representation of an overall pattern of events that characterises stages in the development of debate in our society. The chapters selected for section one of this book further illustrate and explore the framework of 'Deception, Demonstration and Debate'.

We feel that it should be part of the equipment of every person in a democratic society to understand the finer points of this model, be able to locate particular issues within it and make judgements about the quality of the debate. This would entail the development of a greater knowledge of (i) how and why various institutions engage in deception and at whose expense; (ii) why it has been important for certain groups/individuals to reveal a deception; and (iii) the nature and control of the forum (eg the media) in which a public debate takes place. In this way people will be enabled to engage strategically within debates that they feel are important. They can make a judgement about when to write to a newspaper, an MP or a journal; when to join an interest group or take part in a petition or demonstration; and when to reserve judgements and call for more evidence. This form of analysis should start at school and be part of every young person's education. Without this enablement our democracy remains a sham and we lack the dynamism and intelligence to respond to the accumulation of destructive trends that we have described. Vidal (1989) describes the present state of West European and USA society in the following passage:

> The sad truth is that we live not in liberal democracies but in quasi-totalitarian patriarchies. This has been a gradual evolution since the eighteenth century's partial enlightenment. So great now is the indoctrination in the United States and so vast the ignorance due to the - calculated? - collapse of the general school system, that America's high school graduates when shown the Bill of Rights, unidentified, sternly reject all its guaranteed freedoms.

This level of ignorance is a luxury we can no longer afford. Active participation in an open society is our only hope for the future. Before leaving this model we should examine some of the more detailed mechanisms within the model.

The diagram (fig.1) depicts processes, products and social arrangements which claim to make positive contributions to societies' needs but which have deleterious side effects. These can include anything from the manufacture of CFCs or PCBs to the set of banking policies that encouraged large sums of recycled 'oil money' to be lent to Third World countries.

The large cross in 1(b) symbolises the notion that at the stage when the deleterious effects of these actions are unclear or unknown the

S.C.E.R.T. West Bengal
Date 27.2.91

'deception' will be largely unintentional. We are in the position of unintentionally deceiving ourselves as a society. However, as experience with the phenomenon increases it is unlikely that all the closely involved participants remain totally ignorant. If they do develop suspicions they keep them strictly to themselves; they have too much invested (capital or career) in the process to start investigations or enquiries that could call the endeavour into question. The small cross in 1(a) illustrates the fact that some who are closely involved in the process will be the first to know or suspect its deleterious effects. For them deception will be intentional. It is at this point that a politics of non-decision making first appears. This entails an agreement, sometimes tacit, sometimes overt, that certain matters will not be opened up for enquiry or debate, thereby controlling the agenda of debate. Crenson (1971) provides us with an early example of non-decision making. In a large-scale study of communities where 'Business and Industrial Development' was given a high profile, issues relating to air and water pollution were given a low profile. He came to the conclusion that these issues were being excluded from the community's political agenda. Conversely, in communities where issues relating to pollution were given a high profile other collective issues, like race relations, were also prominent. He concluded that the development of political structures that enabled some collective issues to be tackled also enabled others to be given prominence. The control of agendas and public debate in the USA is stated more polemically by Vidal (1989):

> ... the United States is governed by the hugely wealthy military industrial complex. Citizens need not apply for public office unless they agree to serve the famed complex. As a result, in the last presidential election, 51 per cent decided, most sensibly, not to vote.

It is clear that the act of demonstrating the deleterious effects of a well supported activity will not be smooth or straightforward. The first response is understandably to dispute the findings of the research or the veracity of the insider informant. The debate should sensibly then proceed to analyse and enlarge the issues being contested. This, of course, does not always happen. One response favoured by governments and also very powerful organisations, is to say nothing. Information is then difficult to obtain and the legitimacy of demonstration can be difficult to sustain. It may become the word of a large prestigious body against the word of an unknown person or relatively small organisation. Other debate-stifling tactics can and are used. It is possible for the outsider to lose financial support for his/her research; to be asked to do research but relinquish the right to publish; to be subjected to harassment, and in extreme cases, to violence. The insider, or whistle blower, is even more vulnerable. It is common for them to lose their job and find it difficult to obtain

another. This is clearly an issue that requires greater openness. No society can expect to obtain the information it requires to conduct important debates if the people most able to contribute to them have to pay a high price to make the contribution. Rewards beyond a sense of achievement are seldom forthcoming. This cycle of events suppressing demonstration is depicted in fig.1 by the broken return arrow to 1a. On the other hand, an ineffective demonstration results in a situation represented by the broken return arrow to 1b.

During the period of dispute (2) deception about the effects is shown as mainly intentional. This is, of course, an extremely difficult proposition to prove. There are two justifications for presenting 'dispute' in this way. The first is contained in the definition of demonstration. A successful demonstration assumes that substantial evidence of real damage has been obtained. Some demonstrations will fail to do this and be short-lived. However, since there are so few institutional rewards for mounting a successful demonstration of deception and substantial penalties for being unsuccessful, it is assumed that few will be mounted unless there is substantial real evidence. The second rests on the fact that the model is based on the behaviour of systems. We are, as a species, currently destroying the habitat on which we depend at an alarming rate. In this sense we must assume a substantial amount of deception. Deception will typically be shrouded in ideology (such as institutional truth). The term is therefore used here to include self-deception. The tobacco lobby and the food lobby are good examples of this in relation to deaths due to lung cancer and other tobacco-related diseases, and food poisoning and the health effects of deteriorating diets. It is therefore assumed that for a proportion of cases, following a successful demonstration of deleterious effects, the group or organisation will continue to pursue the activity until made to stop by some regulating body or consumer action. The justification used by the producers is usually that while some people need the product or process, they will continue to provide it. This position also becomes closely linked with freedom of choice and sometimes traditional freedoms, although ironically it can also be developed into a defence of minorities, employment and sometimes the poor.

In the final stage (3), the deleterious effects of the process or product are universally acknowledged, the defenders of the process are isolated and legislation or regulation can take effect. At this stage most groups who infringe the regulations will claim to be doing so unintentionally.

At all these stages there is a danger that despite an excellent case (demonstration) the process will not continue to the point of resolution. The debate can be dropped, smothered by other issues or edited out of newspaper and media coverage or suppressed because the demonstrators lack the social power to voice their claims

effectively. As represented by the broken arrow returning to either 1a or 1b via boredom, inertia and no action. The enormous concentration of the press into the hands of a few proprietors and the kind of competition that this has produced between the tabloids, means that the editing out of particular issues has become a reality. In recent computer searches within seven national newspapers we sought indications of how frequently the press passed on information about malnutrition, ecology and the role of the World Bank in the affairs of the Third World countries. The search reveals the number of articles containing the words that are searched for. The results are abbreviated here to include only the *Guardian* and *Today*.

	Number of Articles which contained the selected word	
Word searched for	Today	Guardian
1. Mulnutrition (18 months) (Jan 1987 - June 1988)	6	50
2. World Bank (6 months) (June 1988 - Dec 1988)	6	69
3. Ecolog* (24 months) (July 1986 - June 1988)	52	396

* The root ecolog. was used instead of a word.

Despite the considerable difference in coverage implied by these figures, the real difference is even larger. Many of the articles listed for *Today* were not particularly relevant to a discussion of the problems faced by the Third World. In the case of the World Bank search, for example, we could find no articles that discussed the role of the World Bank in relation to Third World countries or the debt crisis.

Thus the quality and scope of the debate about environmental and development issues is unsatisfactory and it is this problem that lies behind the formation of the Education Network. In addressing this problem it is important to take stock of the potential for new developments offered by schools, higher education and the media. These institutions provide us with an opportunity for renewing consciousness about environment and development issues and changes of behaviour. Yet we have really made little progress in defining *how* this should be done. The second section of this book presents a number of perspectives which are intended to offer some ways forward in this respect.

References

Adams, S. (1984) *Roche versus Adams*. Cape, London.

Berman, M. (1983) *All That Is Solid Melts Into Air: The Experience of Modernity*. Verso, London

Brindley, D. (1989) 'Official figures say poor did poorly' *Guardian*, 17 April.

Buckingham, L. (1989) 'Tax: nearly half of Thatcher largesse "has gone to the rich"' *Guardian*, 8 May.

Buckingham, L. and Milner, M. (1989) 'How Britain's bosses are taking the rise' *Guardian*, 1 July.

Clark, N. (1985) *The Political Economy of Science and Technology*. Basil Blackwell, Oxford.

Crenson, M.A. (1971) *The unpolitics of air pollution: a study of non-decision-making in the cities*. John Hopkin, New York.

Ferguson, E. and Whiston, T. (1983) *Product Life and the Automobile*. Centre for Technology and Policy Studies, Apeldoorn.

Galbraith, J.K. (1989) 'In Pursuit of the Simple Truth' *Guardian*, 28 July.

George, S. (1985) 'From the World Food Conference to 1984: a decade of failure' *Third World Affairs* pp 65-77.

George, S. (1988) *A Fate Worse than Debt*. Penguin, Harmondsworth.

Gillespie, B., Eva, D. and Johnson, R. (1983) 'Carcinogenic risk assessment in the USA and UK: the case of Aldrin/Deildrin' in Barnes B. and Edge D. (eds) *Science in Context*, pp 303-335. Open University Press, Milton Keynes.

Gribbin, J. (1988) *The Hole in the Sky*. Corgi, London.

Habermas, J. (1972) 'Science and Technology as Ideology' in Barnes B. (ed) *The Sociology of Science*, pp 353-375. Penguin, Harmondsworth.

Hayter, T. and Watson, C. (1985) *Aid: Rhetoric and Reality*. Pluto Press, Londo.

Lacey, C. and Williams, R. (eds) (1987) *Education, Ecology and Development: Toward an Education Network*. WWF/Kogan Page, London.

Prebisch, R. (1968) *Toward a global strategy of development*. UNCTAD.

Rostow, W.W. (1966) *The Stages of Economic Growth*. Cambridge University Press.

Schumacher, E.F. (1973) *Small is Beautiful*. Blond and Briggs, London.

Timberlake, L. (1989) 'Nature thrives on an open environment' *Guardian*, 30 June.

Verrett, J. and Carper, J. (1974) *Eating may be hazardous to your health*. Anchor Press, New York.

Vidal, G. (1989) 'Gods and Greens' *Observer*, 27 Aug.

Weir, D. and Schapiro, M. (1981) *Circle of Poison: Pesticides and People in a hungry World*. Inst. for Food and Dev. Policy, San Francisco.

Wintour, P. (1989) 'Figures indicate UK has increasing proportion of poor' *Guardian*, 28 April.

SECTION ONE

INTRODUCTION TO SECTION ONE

Chapter 1 on 'Agribusiness and its Effects on Developing Countries' is an excellent example of the clarification of a complex case of deception. In this article we are not looking at the effects of a single product or the results of policy decisions taken by a few companies. Instead, the article uncovers the deep structure of trading relationships which affect the lives of many millions of people in the Third and First Worlds. Barbara Dinham demonstrates the inadequacy of the view that agribusiness helps the Third World develop, as advocated by representatives of transnational companies[1] and some elements of the academic business world[2].

In the Third World, traditional cultures and their cultures of food production have been undermined. Some people, a minority, have benefitted but a large majority have found their freedoms diminished and traditional supports removed. They find themselves drawn into new relations of production and trade in which they work harder for a smaller return and become increasingly dependent on First World aid and technology. In the First World, in which people mainly benefit from this form of exploitation, through lower commodity prices and a plentiful supply of foodstuffs tailored to their 'needs', the dominant public view does not recognise that a major deception is being practised. The pictures of African famine, South American and Asian poverty portrayed by the media and major charities, coupled with the prominence given to fund-raising activity and Aid creates a view of self-inflicted dependence and one-sided charity.

Barbara Dinham's exploration of the way in which transnational food producers relate to Third World countries provides us with a basic understanding of this complex deception. It should provide the basis for an important debate within schools and in the media. The activities of these large companies need to be open to public scrutiny. The effects of their actions need to be understood at all levels in our society before the 'democracy' can begin to work intelligently.

In chapter two Greg Philo points to the importance of understanding the organisational factors which underpinned news coverage of the Ethiopian famine. Television is shown to have raised public awareness of the famine but not in a straightforward way. We must not be seduced into the idea that newspapers and television news simply tell us what is going on in the world. This point is highlighted by Greg Philo, as he demonstrates how news coverage of the Ethiopian famine was delayed. The chapter is an example of why it is important to understand the nature of the forums in which development issues are brought into public debate.

In chapter 3 Alan Jenkins investigates the way in which a topic can be dealt with narrowly and deceptively in educational and documentary television because of how the production is controlled. By considering the way in which certain dimensions of the environment are neglected or ignored in educational materials produced by a multinational company, it is possible to demonstrate an implicit and interest-laden, rather than an explicit and inevitable, bias. Similarly, the control over documentary coverage of Chinese society exerted by the Chinese government is shown to have a subtle but narrowly directive influence on what is finally presented to the viewer. This chapter points to the important role of understanding how educational television is structured.

The belief that television is a powerful influence, affecting the culture and consumption patterns of young people, is widespread and stretches right across the political spectrum[3] yet this may be at best only a half-truth. Whilst commercial companies have invested millions in their efforts to persuade young people to consume their products with apparent success, Health Education programmes have found their flirtation with the media less rewarding. They have often reacted to their problems by blaming lack of resources or a lack of professionalism in their approach. Anne Karpf presents us with a closer investigation of this apparent dichotomy and finds the situation more complex and more educationally interesting.

The problem of diet is not simply a lack of knowledge or information. Schoolchildren often know what constitutes good food or a balanced diet yet fail to act on this knowledge when it comes to choosing chips for their lunch. These apparent contradictions are also found deeply embedded in government policy which on the one hand projects the message of healthy eating while on the other making it much more difficult to achieve. Anne describes a number of important factors that need to be examined and incorporated into our treatment of food as a topic for media debate. The production of food, food and income, food and culture, food and development, food and the environment, food and gender, the social meaning of food, controversies over food, are all topics relevant to critical education and a deeper treatment by the media.

This chapter is an interesting excursion into the dimensions of a properly conducted media debate about food. In a country which has one of the highest rates of heart disease and where other diet related diseases are also prevalent, we should be serious about the need for such a debate.

In the final chapter of this section Gerard Hastings focuses very specifically on the influence of television advertising on young people. Advertising hardly represents in itself a medium for public debate. Powerful organisations with a well-developed idea of their own self-interest are allowed an almost free hand to persuade us to buy and consume their products. They are able to play down any deleterious effect of this consumption and maximise the attractiveness of the product, often by association or indirect means[4]. Nevertheless, advertising exists as one of the components of public debate. A means by which we are influenced. It follows that if we wish to understand the mechanisms of public debate we need to understand the effects of advertising. In addition, it is possible to mount counter-advertising, eg. anti-alcohol or anti-tobacco, although the revenues for this are typically limited.

Gerard examines some of the ways in which the effects of advertising have been conceptualised. In particular, he is critical of the simple power model in which the effects are seen as a direct manipultion of the public. Instead he emphasises the best 'mix' model used by modern businesses in which advertising is one part of a process of 'satisfying customer needs at a profit'. The expressed needs of the customer and the way the advertising message is received by the audience receive considerable attention in this model. Research becomes focussed on suitable material for 'effective' communication. Imagery, emotional messages and the context of advertising become important considerations and part of a two-way process of research and communication. This sophisticated model of advertising needs to be understood by the consumer and could provide a basis for educational approaches to advertising.

References

1. See 'Engine of Enterprise' *New Internationalist*, June 1987, pp 10-11.

2. See Goldberg, R. (1981) 'The role of the multinational corporation' *American Journal of Agricultural Economics* **63** May, pp 367-374.

3. See Williams, K. (1988) In 'Media and Education Seminar' *Education Network Newsletter* **2** Dec., p 12; *The Campaign for Quality Televiation* (document available from Education Network); and Fishbein, H. 'Socialisation and Television' in Boyd-Barrett, O. and Baham, P. (eds) *Media, Knowledge and Power*. Croom Helm, London pp 299-318.

4. For example, see Tran, M. (1987) 'McDonald's Big Mac shakedown' *Guardian*, 2 June.

Chapter 1

AGRIBUSINESS AND ITS EFFECTS ON DEVELOPING COUNTRIES

Barbara Dinham

There have been great changes in agricultural production in both industrialised and underdeveloped countries since the end of the Second World War. Throughout the world, agricultural production, formerly largely in the hands of peasants or small farmers, is increasingly dominated by big corporations. Agribusiness is the term given to these companies. It is a word which emphasises the broad reach of these large companies, which can be involved in several aspects of food production.

This chapter outlines the strategy of agribusiness development, with particular reference to Africa. A knowledge of the nature of agribusiness is an important tool for understanding the global economy, commodity trading, concepts of development and underdevelopment. In the classroom, this can be developed by starting with everyday products - a banana, a jar of coffee, a cup of hot chocolate or a chocolate bar, working back through the chain of production to the source of the crops, and further back to the companies which sell the agricultural inputs.

Spanning the World

Agribusiness companies have changed the nature of agricultural production, both in industrialised and increasingly in Third World countries. Agricultural production was once relatively self-contained and 'sustainable' - that is to say the nutrients needed to nourish the soil and ensure healthy crops were produced as part of the agricultural cycle. These inputs are now provided by transnational companies which make fertilisers, pesticides, seeds packages - the inputs to farming.

The trade in farm products, the processing, marketing and distribution, are also in the hands of large companies. In some cases, these companies also own the plantations or estates growing the

crops. Unilever, for example, one of the world's largest food companies, owns vast plantations growing tea, palm oil, cocoa and other crops. Many transnationals own the buying companies, the shipping lines, the brokers and the warehouses.

This 'vertical integration' from plantation to supermarket shelf, is less a feature of transnational control now than in the past, as sophisticated computer information systems mean transnationals can keep track of prices and movement of raw materials, and make it possible to control their essential supplies of raw materials without owning all the intermediate structures.

Together, the food, agrochemical and seed transnationals, exercise a profound influence over the kind of crops, and the way in which they are grown. Agribusiness is firmly based in the richer industrialised nations, in Europe, the United States and Japan. The effect of their power and influence is to create a form of agricultural production which is highly capital intensive and technological, and which meets the needs of the richest markets.

Agribusiness operates in countries in both the North and South. In the North, food production has been restructured towards large scale farms. In the continents of both Asia and South America agricultural production is largely, though by no means exclusively, in the hands of big landowners. This has attracted more agribusiness investment, particularly from those transnationals promoting the inputs for production. Africa is still a continent of peasant farmers, but this is being eroded. This paper makes particular reference to Africa and the problems of the Continent in meeting its own food needs.

Food Production and Images of Africa

If large scale food production promoted by agribusiness interests can provide food for all, then it could have a role to play in Africa. But the broader issues of land use, equitable distribution of land, and the distribution of food, are overlooked in the drive for greater production. Any study or evaluation of agricultural development must consider whether such development promotes an equitable distribution of wealth, and consider the distribution, as well as the production, of the produce.

Africa and famine have become intertwined in the minds of many westerners. The popular image of the continent is one whose political agenda is dominated by drought, desertification, 'backward' agriculture, ill-health and inability to feed its own population. In schools, the image of Africa is often dominated by informal aspects of education, which promote concepts based on charity, but which can undermine mutual respect: images of malnourished children, collections for

famine relief, raising money to 'sponsor' a child's education, or water development for a village. These images project the view of a Continent in permanent crisis, and unable to deal with and solve its own affairs.

African cultures and traditions are rich and varied. Farmers, mainly women, are skilled in producing crops in often difficult conditions, and in the art of nurturing fragile tropical soils. The knowledge of farmers is underrated because it is not seen as being 'scientific'. In peasant farming communities, the knowledge of the soil and of the properties of seeds is astounding to those of us who are used to written and 'scientific' classifications. Farmers select by sight and feel, seeds which will respond well in a variety of unpredictable conditions: some will withstand drought, early rains, others will flourish on high ground, low ground, and so on, to ensure an adequate crop.

How do these two images relate to each other? Sub-Saharan Africa is the only region in the world where per capita food production declined in a 20 year period from the early 1960s to the early 1980s.

Against the backdrop of food shortages, the Continent is a rich source of crops we consume daily in Britain: tea, coffee, cocoa, sugar, groundnuts, palmoil, rubber, cotton, tropical hardwoods. African countries export fresh vegetables and exotic fruits to line our supermarket shelves. Fresh flowers are flown daily from Africa to European markets. Why then, if Africa is such a rich source of food supplies for the industrial markets, is the country seen as failing to feed its own population. Agribusiness provides a key to understanding this paradox.

Agriculture is crucial to the economies of many African countries. By the end of the seventies, over half the countries of sub-Saharan Africa (27 of 43 countries), were dependent on agricultural exports for half of the total foreign exchange earnings. In general, this does not represent diversified agricultural production, but over-dependence on only two or three crops: 17 countries derived over 80 per cent of income from exports from three or fewer commodities.

These figures for dependence on exports of agricultural produce must be considered in the context of the world commodity markets. Export crops are sold on the world markets largely unprocessed. They are bought by transnational food and processing markets, and are processed, packaged and marketed in the richer industrialised countries. Historically, for most commodities, it has been a 'buyer's market', thus giving the purchasing companies more leverage than the selling countries. With many countries largely dependent on earnings from agricultural exports for their foreign exchange, the terms of trade are operating against producing countries. They receive less and less for their exports, while having to pay more for imports of capital equipment, farming inputs, and consumer goods.

How Agribusiness Works

Export crops v. food production

Food shortages in Africa have deep roots in the legacy of plantation companies and colonial policies which structured agriculture towards export of luxury crops for western markets, and makes production for export more profitable than growing food to sell locally. In the height of the Sahel drought, in the early 1970s, Senegal was exporting fresh vegetables to Europe, and 55 per cent of the country's arable land was producing groundnuts for export.

A report of the United Nations Food & Agricultural Organisation and Organisation of African Unity - Famine in Africa - concluded that famine in Africa cannot be dissociated from 'government policies and development strategies that have emphasised production of cash crops mainly for export at the expense of food for domestic consumption. The best land is devoted to cash crops, which are also usually the main beneficiaries of official research, extension, credit, input supplies, marketing services and other incentives.' Cash crops not only attract the best land, they also attract the major part of investment in agriculture.

The demand generated by food transnationals influences what is grown. They need a regular and reliable supply of good quality raw material to feed into the markets, preferably enough of an oversupply to keep prices of the raw materials low. Important considerations for farmers, particularly small landowners, are the cash income from crops and the fate of the crop if the price is low and impossible to sell. Food crops can always be stored to guard against low future yields, but there is little that a farmer, or producing country, can do with over abundant supplies of export crops like tea, coffee, jute, cocoa: the quantities grown cannot be consumed locally, or traded with other Third World countries.

Ownership and Control of Markets:

The world market in Africa's most important crops is dominated by transnationals. The buying companies are almost without exception in a stronger position than the producing countries, and these companies operate policies to ensure that large quantities of good quality raw materials are produced. It is in their interests that there is a tendency to over-produce, thus keeping prices down.

Cocoa sales are dominated by the demands of five large companies, which dominate the world market: Mars (USA), Hershey (USA), Jacobs Suchard (Switzerland), Nestle (Switzerland). The British company, Cadbury Schweppes is also important. The cocoa processing industry is dominated by five companies, which includes one of the main chocolate companies, Jacobs Suchard. Other major proces-

sors are Cargill (USA), W.R. Grace (USA), Cacao Barry (France) and Gill & Duffus (UK - now owned by Dalgety).

Ninety per cent of tea consumed in Western Europe and North America is marketed by Unilever, Cadbury Schweppes, Allied Breweries, Nestle's, Standard Brands, Kellogg's and Coca Cola. Unilever is particularly powerful in the world market. As the owner of both Brooke Bond and Liptons, it alone buys 23 per cent of total annual tea production. Unilever also owns major tea estates in India and East Africa.

Coffee is dominated by Nestle's and General Foods (Maxwell House). Unilever dominates world trade in palm oil with the French company Lesieur. Most of the world's cotton crop traded on the world market (85-90 per cent) is bought by fifteen companies: four based in the United States, a Japanese group, and about ten other companies.

In industrialised countries, the retail outlets have gained significant control over the marketing of food, and these supermarket chains are in general independent of the global food transnationals. The growing proportion of raw materials for consumption are now sold under the brand names of these big chains: these 'own label' brands - tea and coffee bearing the brand names of Sainsbury, Tesco, Safeway and other retailers. However the crops are still bought on the world market by the big food and processing transnationals, who package the products for supermarkets.

The growth of agri-consultancies

In its early stages of development, agribusiness interests sought the direct ownership of plantations. While still remaining significant, land ownership has become less important than consultancies which provide influence without responsibility. All major agribusiness companies have consultancy subsidiaries, which advise on agricultural projects, and promote their view of agricultural development. Sophisticated 'agribusiness' information industries organise global conferences discussing new opportunities, developments and new markets. Through consultancies, transnationals develop links with aid and development banks, and bilateral and multilateral agencies for information about 'development projects' in Third World countries.

All the major agribusiness companies operate consultancies, whether they are concerned with agricultural inputs or outputs. The services range from advice on seed and hybrid varieties, 'crop protection' (i.e. pesticides), to advising on which crops to plant, carrying out feasibility studies, implementing the scheme, and at times managing the project. Companies receive a fee for their services, on-going management and service fees. There is no capital investment and no risk involved for the companies. Projects under

the direction of transnational consultancies promote a particular model of agricultural development, which is capital and technologically intensive.

Agribusiness consultancies contribute to the dependent position of Third World countries. Consultancies are employed and paid by governments, to advise on agricultural developments and projects. It is not unusual for these to be paid for with 'aid' (loans) from the World Bank and other multilateral or bilateral agencies. The project cost is borne by governments.

Projects of this nature contribute to the massive debt situation of third world countries. They require too much investment, while taking a narrow view of development. To ensure the success of the project, there is a tendency to situate these developments on the best land, displacing farmers. In this way they fail to meet the needs of peasant producers, and are in direct competition for investment and resources with food crops for local consumption.

World Bank and other aid loans concentrate on export crops, on the basis that the exports will bring in foreign exchange and repay the loans. However on this basis debt has massively increased. In the case of cocoa production in Ghana - largely produced by peasant farmers, but falling behind in world production - the World Bank loans came with the usual conditions. These conditions effectively meant that privatisation and dismantling of the infrastructure which supported peasant farmers. One third of all workers in the cocoa industry lost their jobs. Further employment cuts are being implemented. The agribusiness inputs industry directly benefits, as labour is replaced by pesticides, which will be increasingly made freely available on the local market, rather than regulated and applied by trained and experienced rural extension workers.

A Transnational in Operation - Unilever: From Plantation to Cans

Unilever is a massive company. It is Europe's largest non-oil multinational and is among the largest dozen companies in the world. Its annual profits now exceed £1 billion - the second British company (the other is ICI) to pass the magic billion.

Unilever specialises in processing and packaging goods - in high volume, low cost products. It would be almost impossible to live in any industrial country today and avoid Unilever's products. Half the shelf space in most kitchens, bathrooms, and laundries is probably occupied by their goods which undoubtedly make modern living easier - if occasionally excessive.

In some Third World countries, Unilever is literally ubiquitous. In Malawi, the company not only dominates household processed goods, it also operates the distribution network for the whole

country, and ensures that only Unilever products are distributed.

The product range is enormous, although the name Unilever appears on no products. Brand names include: Batchelors, Birds Eye, Brooke Bond, Lever Brothers, Liptons, Mattessons Meats, Walls Meats, Walls ice creams, John West, Cup-a-Soup, Vesta; edible oil products include Blue Band, Stork, Flora, Latta, Cookeen, Crisp 'n Dry. Household products include Lux, Persil, Omo, Sunlight, Vim, All Clear Shampoo, Timotei, Gibbs SR toothpaste, Signal. They took over Chesebrough Ponds in 1986, paying over £2.7 billion for it, to add the famous brand names of Ponds Cold Creams, Q-tips, Vaseline and Cutex.

Packaging into small quantities, and thus 'adding value' ie making products cost more, has been a lifelong speciality of Unilever. Its founder, William Heskith Lever, started as a boy in his father's Bolton grocery business. Later as a partner, he expanded the firm into wholesaling at Wigan, and in 1884 began selling soap manufactured for him by other firms under the brand name 'Sunlight'. From then he bought up soap works in Warrington and began manufacturing the products. Workers in the Sunlight soap works were housed in the model town of Port Sunlight, purpose built in 1887.

Plantations

Lever had a passion for growth, and it was a logical step to continue integrating the production process. He established one of the first plantations owned by a foreign company in Africa (earlier plantations had been owned by settlers) in Zaire - then the Belgian Congo - in 1911.

Lever had been determined to secure control of palm oil supplies for the company's Port Sunlight soap factories for years - this move now gave him the right to choose 74,000 hectares of palm-bearing land, and rights to freehold property after 25 years. The land was 'appropriated' (taken) from the local population. Later plantations were added in Ghana, Nigeria, Cameroon and Gabon, and interests extended into coffee, tea and cocoa production, though palm oil plantations still outstrip the others.

Unlike other big manufacturing transnationals, for example in the car industry, micro-electronics, chemicals, it is not Unilever's production lines that span the globe, but its grip on sources and supplies of raw materials.

It was important to establish plantations to secure regular and reliable supplies of raw materials of the quality needed in the Unilever factories. This need still dominates the company's search for raw mterials and the company has developed a range of strategies:

1. Direct ownership of plantations is still important, although

these provide only a very small proportion of the company's raw material supplies. Unilever does not have a policy of buying directly from its own plantations: produce is traded on the world market and bought back at auction. The plantations are important as a source of knowledge of crop production, and for experimental use.

2. Unilever subsidiaries operate as consultancies which advise, carry out feasibility studies for crop development, set up and manage estates and plantations on contract for other companies or for governments. Consultancies are influential in the development of plantations.
3. Unilever operates joint ventures with other transnationals, for example it has interests in plantations operated by a large British-based plantation company in Malaysia, Harrison & Crossfield.
4. Unilever's agricultural research is influential in the world of cash crop production. The company is a leader in the technology of palm oil cloning, and this provides a profitable business supplying other plantations.
5. Long term strategies for securing supplies include biotechnology research which can not only change the genetic structure of plants to improve yields, but also to produce, for example, coffee flavoured sugar beet. The company seeks a wide range of substitutes for its raw materials in both these unconventional and more conventional ways: eg substituting edible oils and fats according to availability.

Transnational food producers such as Unilever can afford to seek the cheapest and most profitable sources of supply, and to encourage the cheapest production. In the 1960s, Unilever's largest palm oil plantations were in Zaire. However the 1960s in Zaire did not provide a favourable political climate for investment, and Unilever vacated many of its estates. At the same time, investment was switched to Malaysia, where yearly production increased. Similar trends have operated with cocoa production, where Ghana was once the major producer, but has been overtaken by the more 'politically stable' Ivory Coast and Malaysia. Malaysia attracts vast investment in cocoa, even though the quality of the beans is very poor.

Meanwhile, on the home markets, Unilever has invested massive resources in developing the technology to make oils and fats substitutable for each other. Techniques such as bleaching, removing flavours, can be applied to all oils. Armed with computerised technology, the company can constantly buy the cheapest oils on the market, be these palm oil, European crops like sunflower and oilseed rape, or even fish oil, and for most uses these have become interchangeable.

While it may seem that this operates against the company's own plantation interests, there are always compensations. For example, palm oil prices hit a particular low in 1985-86. Unilever's 1986 Annual Report noted that sadly they had lower profits in their plantation interests. Elsewhere in the Annual Report, however, they note with delight that the low prices of raw materials brought 'windfall profits on margarine, edible oils and fats'.

Conclusion

Agribusiness is a major influence on global food production, and plays an important role in structuring changes in food production in Third World economies. It is difficult to deal with subjects such as commodities, world trade, agriculture and food production without examining the major changes brought by agricultural development strategies since the second world war - and the influence exerted by the large agrochemical and food transnationals. This serves as an introduction to some of those trends. A consequence of the major restructuring underway, is the difficulty of finding information which gives a voice to those fundamentally affected: particularly small farmers, indigenous peoples, and those who seek more self-sufficient alternatives to the cycle of dependency.

References

Coote, B. (1987) *The Hunger Crop: Poverty and the Sugar Industry.* Oxfam, Public Affairs Unit.

Dinham, B. and Hines, C. (1982) *Agribusiness in Africa.* Earth Resources Research, London.

George, S. (1976) *How the Other Half Dies.* Penguin.

Lappe, Moore, F. and Collins, J. (1979) *Food First.* Ballantine Books.

Larkin, N. and Widdowson, J. (1988) *Sweet or Sour.* Association for Curriculum Development, London.

Latin American Bureau (1987) *Green Gold: Bananas and Dependency in the Eastern Carib.*

Latin America Bureau (1988) *Whose Gold? Geest and the Banana Trade.*

Moody, R. (1988) *The Indigenous Voice, Visions and Realities*, Volumes 1 and 2. Zed Press, London.

New Internationalist, Unilever's Sticky Fingers - Inside a Multinational, **172**, June 1987. £1.00 from *New Internationalist*, 42 Hythe Bridge Street, Oxford OX1 2EP.

Shiva, V. (1988) *Staying Alive, Women, Ecology and Development*, Zed Press, London.

Chapter 2

TELEVISION AND THE ETHIOPIAN FAMINE*

Greg Philo and Robert Lamb

Introduction

There has been much criticism of the way in which Western audiences are informed about the Third World. As the UNESCO study *Many Voices One World* commented: 'The imbalance in the flow of news and information between industrialised and developing countries [has been] a major topic in international meetings... Today virtually no-one disputes the reality of this imbalance.' It went on to note that '[it] must be acknowledged that the way in which the public in the industrialised countries is informed about the Third World is not very effective'.[1]

As a case study, this chapter examines the television coverage of the Ethiopian Famine of 1984/85. Since it is generally accepted that British television first broke the news of the famine in Ethiopia, this study centres on the UK experience. The first section examines how news organisations operate, gather information and set news priorities. We ask why it was that the famine, which was predicted well in advance, took so long to be generally publicised. In the second section we look at the content of what was said in news reports and finally we examine the impact that reports had upon mass audiences. From this we are able, first, to draw conclusions about the manner in which information flows between the developed and the developing world and, second, to recommend how the United Nations and other groups concerned with emergency relief and development may be better able to respond to famine and similar predictable crises.

*Extracts of this chapter previously appeared in a report prepared for UNESCO on behalf of The Canadian Film Institute by Greg Philo and The Television Trust for the Environment (TVE).

1. The Organisation of News and News Values

There was a horrifying sense in which the famine in Ethiopia and Sudan was unavoidable, and had somehow been allowed to happen. In November 1984, a British Member of Parliament, Russell Johnston stated in the House of Commons:

> The entire aid world has been screaming from the rooftops for the last eighteen months that what has happened in Ethiopia was about to occur, yet it was only when we saw it in colour on the screens in our living rooms that Government acted.[2]

As Mary Magistad wrote:

> Warnings not only from the RRC (Ethiopian Relief and Rehabilitation Commission), but also from British aid agencies working in Ethiopia, and from research organisations like the International Disasters Institute, began in 1982 and increased in quantity and intensity throughout 1983 and the first half of 1984.[3]

The story of the impending disaster had been carried in the 'quality' press in the UK and other European countries since at least the beginning of 1984, yet it made no international impact on television until October of that year. Once the catastrophe had happened, Kenya-based cameraman Mohamed Amin was able to film it for Visnews and his pictures were then carried by the BBC. Yet Mohamed Amin had in fact travelled in the area in April of 1984 and in May had published material which predicted that millions of people would starve. The story was picked up by Reuters news agency but again failed to produce any immediate and major response from the broadcasting organisations. Lloyd Timberlake of the International Institute for Environment and Development (IIED) told us that he had gone on a United Nations Environment Programme-sponsored Earthscan field trip to the affected areas in May 1984 with 24 journalists. Their copy had been prominently carried in some Western European newspapers, but this had 'sunk without trace in terms of exciting interest in the organisations'.[4]

Indeed in November 1984 the UNICEF representatives in Addis Ababa stated:

> We have been asking for help since early 1983. It seems you have to have thousands of corpses before people will sit up and take notice.[5]

The media have a crucial role here. For although it is governments and relief agencies which provide aid, the media are central in galvanising an international response and in pressuring governments to provide more adequate levels of aid.

The Story Breaks

Despite all the early warnings, the story of the 1984 famine did not

begin to break through into television until July of that year. The catalyst for this was *Seeds of Despair*, a documentary by the British Independent TV Company, Central Television. *Seeds of Despair* recorded the first wave of famine victims into the relief camps at Korem. The programme makers at Central considered that the situation was sufficiently grave that it should go out on television with an appeal for aid. Consequently, they approached the UK Disasters Emergency Committee which decides on such issues. The BBC has representatives on this Committee and the decision was made within the Corporation that it should produce its own report to go out on the same day as the appeal on the Independent Television Network (ITV). Writing in *The Listener*, the BBC's semi-independent national weekly, Brian Phelan described the genesis of the first BBC report:

> On the same day, 17 July, partly in competition, partly in cooperation, BBC Television News showed the first Michael Buerk report from Ethiopia. It was a rushed job, a direct response to 'Seeds of Despair', which the BBC had seen as a member of the Disasters Emergency Committee. Buerk was dispatched hot-foot to get in-house footage. The Ethiopian Government refused to give him a visa, so he hitched a ride with a relief mission. This meant he missed Korem, the epicentre of the famine, and had to film in the south, which was still green compared with the brown desiccation of the north. Above all, it means that this was a typical 'fireman's' piece, with the correspondent flying in and out again in a day, staying just long enough to give a snap judgement to camera.[6]

At this stage the story was still not given 'lead' story status by television. That there was public interest in the story was shown, however, by the fact that over £9 million was raised by the BBC and ITV appeals for donations. Nevertheless, the story faded from the news. Not until the 23 October was there the BBC report which finally treated the disaster as a major news story.

The Second Buerk Report

In the period after July, Mohamed Amin, Chief of Visnews' African bureau, secured the consent of Visnews to follow up the first BBC story. He eventually gained the permission of the Ethiopian authorities to film in areas outside the capital, Addis Ababa. The party consisted of Mohamed Amin, his sound recordist and the BBC radio correspondent, Mike Wooldridge. At the last moment Mohamed Amin received a call from Michael Buerk asking if it would be possible to obtain another permit so that he might travel with them.

They were to have gone on Monday 15 October, but because of the addition of Buerk there was a delay of two days while Amin contacted the Ethiopian authorities to obtain another permit. There was then a further delay of two days taken up in arguments with the Ethiopians over whether they could film in Makalle, a militarily

sensitive area. Eventually they left Addis Ababa on 19 October and filmed in Makalle that day, travelling to Korem and filming there on 20 and 21 October. They flew back to Nairobi and edited the material there on the 22nd. That evening Buerk flew back to London with the video tapes and the material was first transmitted by the BBC on 23 October.

We asked Mohamed Amin whether there had been any problems in getting the media organisations to take up the story. He told us:

> The pictures were the property of Visnews not the BBC. There was no trouble with Visnews as they are usually interested in what comes from the field. Visnews offered the material to Eurovision on 23 October and they rejected it; it was offered to NBC in the States the same day and they rejected it.[7]

The head of NBC's London bureau, Joe Angotti, then persuaded the New York office to take the pictures over by satellite to at least look at them. According to Mohamed Amin:

> Joe Angotti was putting a lot of pressure on them to take the pictures - he persuaded them to look at the pictures so they took them over on the 23rd. When they had seen the pictures they re-cut them and put them in as the last item on their nightly news ... NBC ran full page ads in the New York Times after they had seen the public responses. Eurovision asked for the pictures the following day.[8]

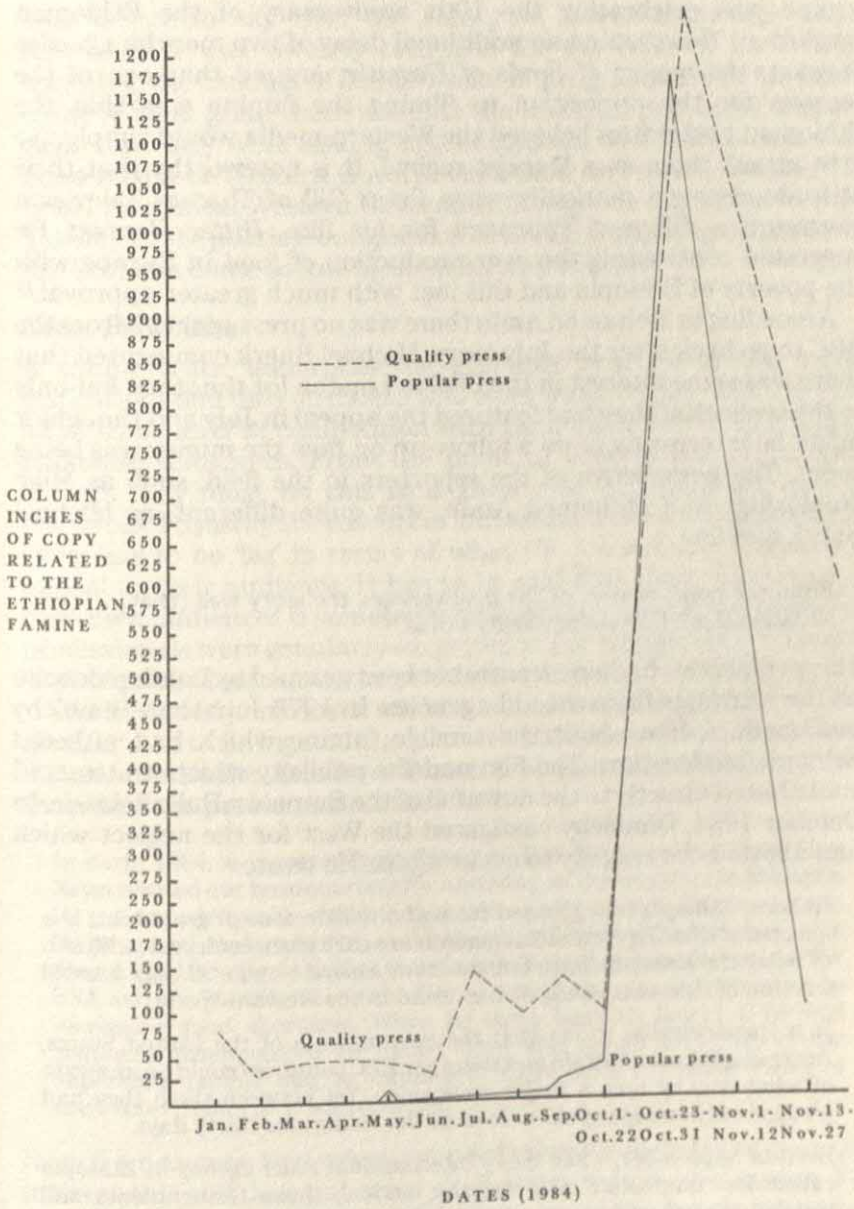
Joe Angotti, recounted:

> The initial reaction was: 'ship it in and we'll have a look at it in a week or so because we can't get it into the show'... At the risk of sounding callous, when you say over the telephone that we have a story on the Ethiopian famine, there's nothing compelling about that in terms of rushing to get it on the air - because everyone has seen the pictures and the swollen bellies before ... I made repeated calls but they said there was just too much material to get it in that night. I went off and came back and saw the BBC Nine O'Clock News and decided to try one more time. I told them that I was going to feed it into the satellite and they were to look at it and it came through to New York an hour before they went on...[9]

According to Robert Lamb, who was part of a Central TV team filming debates at the UN General Assembly in New York, the effect of the NBC report was electrifying. From nowhere, the crisis in Africa became the lead agenda item at the General Assembly.

In the UK the BBC's decision to use the Visnews pictures as a major story had a huge impact upon the rest of the media coverage. The graph included below shows the effect upon the popular press in Britain. The news of the impending disaster had been featured fairly consistently in the quality press. The question is why did it take so long for it to be treated as a major news issue by television?

Quality vs Popular Press
Column Inches of Copy Devoted to Ethiopian Famine Coverage[10]



News Limits

There are many limits which journalists point to when discussing the constraints that can operate on news stories – limits for example, of time, space and resources. More concretely, in the case of the famine, the Ethiopian authorities were criticised for limiting the movement of journalists beyond Addis Ababa, during the period in which the regime was celebrating the 10th anniversary of the Ethiopian revolution. This created an additional delay of two months. Charles Stewart, the maker of *Seeds of Despair*, argued that one of the reasons for the opposition to filming the famine was that the Ethiopian authorities believed the Western media would simply use it to attack them as a Marxist regime. It is noteworthy that their attitude changed markedly when Peter Gill of Thames Television suggested a different approach for his film, *Bitter Harvest*. He suggested contrasting the over-production of food in Europe with the poverty of Ethiopia and this met with much greater approval.[11]

According to Mohamed Amin there was no pressure at all from the BBC to go back after the July story. Michael Buerk commented that there was some interest in the BBC in London for the story, but only in the sense that they had featured the appeal in July and thought it might be interesting to do a follow-up on how the money was being spent. The perspective of the reporters in the field, such as Mike Wooldridge and Mohamed Amin, was quite different, as Michael Buerk told us:

> From the point of view of the fieldworkers, the story was (that) ... the situation there had got markedly worse.[12]

This perspective had apparently not been grasped by London despite all the warnings from the aid agencies. In 1973 Jonathan Dimbleby had made a film about the terrible famine which had afflicted Ethiopia at that time. The film and the publicity which it attracted contributed directly to the downfall of the Emperor, Haile Selassie. In October 1984, Dimbleby castigated the West for the neglect which had allowed the tragedy to occur again. He wrote:

> In June, Ethiopia had pleaded for half a million tons of grain. This is a quarter of what Egypt and Bangladesh are each given each year, a fiftieth of what the Russians have bought from America and still only a small fraction of that vast stockpile harvested in the Western World.
>
> It is inconceivable to me that the governments of the United States, Australia, Canada, Britain and the other EEC countries could be unaware of what was by now a major emergency. Yet between them they had pledged only enough grain to feed all the victims for thirty days.
>
> Even in September, when every international relief agency in Ethiopia called for 'immediate and massive action', those Governments still insisted that there was no more grain available. That was, and is, an

> unforgivable nonsense to which those rag doll corpses now bear terrible witness.
>
> Now, when it is too late, Western Governments had been driven by public opinion into a belated and inadequate response, although they have the temerity to present it to us as though it were a swift and generous reaction to a dramatic and unexpected crisis.[13]

This is not to say that the Ethiopian Government was above reproach. It was severely criticised for the level of its military spending, the conduct of its resettlement programme, and for failing to move what grain there was into the war-torn provinces. But it is clear that they were issuing urgent appeals well before either the mass media or Western Governments took any serious notice. The priorities of most Western Governments might be explained by their hostility to the political complexion of the Ethiopian regime. But why did Ethiopia come so low in the priorities of news?

News Priorities

A simple truth underpins the everyday practice of the media institutions and the journalists who work within them – that they are all at some level in competition with each other to sell stories and maximise audiences. From the point of view of the programme makers they must do this at a given cost and at a set level of resources. To justify the resources and for an issue to be featured, the story has to be 'big' in terms of what the journalists imagine will appeal to their audience. It has to be said that their perception of their own audiences is sometimes wide of the mark. Many television professionals were genuinely surprised at the intense and prolonged level of public interest in the problems of Africa.

The inherited journalistic wisdom is that for the story to count, the disaster has to be big and the pictures have to be dramatic. Wendy Riches, the Public Relations Director of Save the Children Fund, described the problems that they had:

> In early 1984, a reporter from 'News at Ten' (Independent Television News) visited our headquarters for a briefing on the situation in Ethiopia. He was knowledgeable about the problems and sympathetic to our fears. He promised to do what he could and shortly visited Korem, where he filmed. But the reports he filed focused on the political involvement of the TNA and the guerilla war in the North, with only a passing reference to increasing food shortages. When he came back to England, he was genuinely disappointed he hadn't been able to do more about the impending famine but, he explained, there were no acute cases of starvation to film so it wasn't 'news'.[14]

Even if we assume that television needs terrible pictures to generate interest this still does not seem altogether credible as a reason. For example, when television news wishes to stress the impact of strikes,

they can use library film of previous disputes to show the consequences of industrial action. In this way they have shown the dangers to public health caused by disputes involving groups such as refuse workers and have done so in the very first days of the dispute, before the alleged effects have actually occurred.[15] By the same token, it would have presumably been possible to use library film of the previous Ethiopian famine and to say that this was about to happen again unless something was done to stop it. But featuring a huge potential disaster in the Third World does not warrant the same research and commitment involved in illustrating much smaller potential problems at home. This is not always the fault of individual journalists in the field – it is more to do with the priorities set by the organisations within which they work. As Brendan Farrow who dealt with the Ethiopian story for Visnews stated:

> There is no such person as the BBC: there are individuals there, some of whom will have seen the story and are interested in it. But overall the priority of an organisation like the BBC is their own national news and interests and Third World issues come behind that.[16]

Consequently, the view has persisted that if the resources are to be committed the story has to be 'big' and successive stories have to be bigger and bigger to justify attention. Nick Cater of the *Guardian* has quoted the comments of a BBC team filming in Sudan in June 1985 as follows:

> But it has got to be good, as a BBC team made clear in June in Sudan. 'What happens if what you find isn't worse than Ethiopia?' they were asked. 'There's no story,' they replied.[17]

Central Television, the company which actually broke the story with *Seeds of Despair*, was in a different position. The United Nations Environment Programme had provided director/cameraman, Charles Stewart, with a three-month grant in 1983 to research a TV documentary on desertification in Ethiopia. Stewart was therefore on hand to see the crisis develop.

Stewart and Robert Lamb, Director of the Central-sponsored Television Trust for the Environment, were on hand to convince Central's programme commissioners that the desertification series should be broken off to film in Korem. Even then there was a debate over several weeks within the company – which has no international news-making mandate – over whether to make the film that became *Seeds of Despair*. It required considerable commitment in time and resources and would take up one of Central's limited quota of slots on the national network. One producer commented 'that the situation was analogous to covering the bombing blitz – you could not do the story until the bombs had dropped'. But eventually the view prevailed that the story should be made because some 'bombs' had dropped

already and that a lot more were about to.

That debate could have gone on in any one of hundreds of media organisations and the more commercial its priorities, the sooner the conversation would have turned to how many people would watch and what would the impact on the audience be? To Central's credit, they did send the team in. This decision had a crucial impact because of the way in which news organisations operate in relation to each other.

News Organisations

A good reason for covering a story is that someone else might do it before you. Competition between channels can mean that they will all suddenly pursue a story if it is judged to be sufficiently important, or in different circumstances it can mean that some organisations will reject the story if they decide that it has already been covered by their competitors.[18] Television is so competitive that even bulletins on the same channel compete with each other over the treatment of specific stories. Michael Buerk told us how this had affected the treatment of his second report from Ethiopia. The *Six O'Clock News* on the BBC had led with the story as a six minute piece, giving it maximum impact. By contrast, the *Nine O'Clock News* had downgraded the story to fourth position and led with a story on the continuing British miners' strike, which was then in its seventh month.[19]

Even with the *Six O'Clock News*, the decision to use the Buerk/Amin piece first was not immediate. By chance, it was a slack news day but even then there was a discussion about whether to use other possible news stories. John Simpson of the BBC, who was part of the discussion commented that 'we could have led with any of a handful of fairly substantial stories ... in the end it was decided to try an imaginative lead.'[20]

Another feature of the way in which television companies tend to be organised is that they are all physically separate from each other. There is no special reason why, for example, a documentary maker from Central Television would have any contact with either BBC Television News or even with Independent Television News. When the makers of *Seeds of Despair* returned from Ethiopia to London, their initial response was simply to wait until their allotted programme slot came round, though they did manage to achieve an earlier showing for it than had originally been planned.

But it was their decision to link the programme to a public appeal which seems finally to have instigated the response from the BBC. The view expressed in Central was that, as programme makers, they were a little put out by being scooped by the BBC, but that from the point of view of the Ethiopians it was the best thing that could have happened. The BBC would put out the story through its whole

organisation - on everything from the *World Service* through to current affairs programmes such as *Newsnight*.

The competition between companies meant that there was then an undignified rush to claim credit for the story. Visnews put out press releases talking of their 'exclusive coverage', while the BBC ran 'anniversary' pieces on their breaking of the story.[21]

One conclusion from all of this is that the decision to feature the story of the famine and the manner in which it was treated were largely directed by the internal logic of the media institutions.[22] This is not to say that there was no commitment on the part of individual journalists to the story. Indeed the impact of the October report from Buerk was heightened by the personal commitment which he evidently felt.

Media Priorities and Relief Support

The difference in perspective between media workers and relief workers can even lead to quite different understandings of what is actually occurring. Before making *Seeds of Despair*, Charles Stewart, who had filmed for an extended period in the Ethiopian Highlands, wrote:

> One of the aid workers told me right at the beginning that people don't understand ... We were there for a year before the famine. In that first year, people were short of food for three months but that was normal. In the villages we were in, you couldn't see any malnutrition. We thought everyone was telling us lies. But then you began to notice that the children were a bit thin, a bit small. People live short lives, they die quicker. All that's normal. There's a lot of blindness. One out of every ten is blind in one eye. One out of two hundred is blind in both eyes. Starvation at that level doesn't strike you.[23]

The likelihood of it striking a journalist is probably lessened if the style of reporting is to rush in and out of an area, with a few hours on the ground.

How can these differences be resolved? Courtnay Tordoff, BBC's Foreign News Editor, told us that the BBC talks to various relief organisations regularly. On the other hand, Pam Pouncy, the secretary of the Disasters Emergency Committee, has argued that there is a need for a closer liaison with the controllers of news.[24] She was concerned that if relations with the media are not changed then the whole situation would simply recur.

The everyday practices of television will have to be rethought if it is to show a more consistent commitment to the problems of the Third World. In reply, the broadcasters might answer that it is not their job to do this - they are there simply to report the stories. But if the broadcasters want to take credit on humanitarian grounds for finally bringing the deaths of tens of thousands of people to the

world's attention, then they might also wish to ask whether they could have done so sooner and perhaps saved even more lives.

2. Television Content

Before examining the possible impact of the Ethiopian famine television coverage, it is important to consider the kind of images of the Third World offered to Western audiences. The UNESCO study, *Many Voices One World*, commented that 'chauvinist attitudes and ethnocentricity in some professional communicators may warp their selection and interpretation of news from foreign environments'.[25] Television is relaying images to an audience whose beliefs are already partly formed, and who share in different degrees a common cultural inheritance. This includes assumptions about who lives in the Third World, how they live and what their problems are. Some of these assumptions derive from the history of colonial contacts, from 'racial' generalisations and indeed from the images provided by television and the press as well as those found in children's comics, school books, films and magazines.

Our Cultural Heritage

In an important study of children's literature Jenny Laishley found that information about pre-colonial Africa, India, the Caribbean or America was rarely made available. This was a characteristic both of the books themselves and the emphasis of the curriculum. She commented that 'everything that is deemed to be of significance starts when the Europeans arrive'.[26] School textbooks written in the 1930s but used in classrooms in the 1970s were found to encourage complacency about racist exploitation. For example, consider the following extract from *Work in Other Lands*:

> the darkies who grow cotton are happy people with few cares. The planter looks very carefully after his darkies..., long, long ago many of the darkies were slaves. Even then, very many of them were happy, for they are an easy going people.[27]

In a study of children's comics Laishley has shown how such images of blacks and Third World peoples find some resonance in popular culture. In the boys' comic *Smash*, Africans were depicted as stupid and ineffective savages tamed by white men. Another comic told of a Boer Trek in the 1830s. The blacks in the story were described as 'terrible people' who made war among themselves yet no mention was made of the fact that whites were forcibly taking over land used by the indigenous population.[28] Another key component of popular culture is of course television itself. A recent BBC programme looked critically at the images which were offered in News and Current

Affairs. Mark Tully, a New Delhi-based BBC correspondent, commented:

> I find that there is a great deal of misunderstanding about India amongst ordinary people. I mean I remember once I was at a meeting - it was a political meeting - and I asked a question, I said 'Was the candidate happy about the amount of aid that Britain was giving to the developing countries', and a woman turned round to me and she said: 'What do you want to give them aid for, it's all their own fault - they are lazy - if they worked hard they would be as well off as we are'.
>
> But of course that is a total misunderstanding of the situation - and judging by the way that woman talked I fear she must have got most of her opinions from the media.
>
> We tend, I think, to give listeners and viewers the impression that poverty is a crime committed by the country in which that poverty occurs and that it could perfectly easily be eradicated if the country really tried to do so. And I just don't think that is true.[29]

It is not hard to see how much images of the Third World can correspond with other popular beliefs about the 'reasons' for poverty, for example, blaming it on a lack of education and ability or simply blaming it on over-population. The above examples do not represent the whole content of television or indeed everything that goes on in the classroom. There have been serious attempts to offer more diverse accounts. But the evidence suggests that these are likely to be overwhelmed within a popular culture and television images which focus upon very simplistic explanations. For example, the Inner London Education Authority (ILEA) has begun to analyse the attitudes of school children to the Third World. Of this study, Anne Simpson wrote:

> A group of third form pupils in an ILEA secondary school, when asked about their images of the 'Third World' listed the following:
>
> poverty, babies dying, monsoons, war, devastated crops, starvation, disease, drought, refugees, flies, death, Oxfam, dirty water, India, Cambodia, curry, beggars, malnutrition, bald children, large families, insects, stealing, poor clothing, bad teeth, kids with pot bellies, mud huts, injections.
>
> When asked where these images came from the class said that 'Blue Peter' had many appeals for blankets and water pumps to help poor people in poor countries; 'John Craven's Newsround' often showed pot-bellied children eating rice; TV programmes including news items about war and refugees provided some more of the images.[30]

One of the problems with such images, whether they appear in the advertisements of aid agencies or on the television news, is that they show the population of the Third World simply as victims. They do not explore the causes of poverty, such as the prevailing political and economic relationships between the rich and poor world. Neither do

they show Third World populations or governments doing anything on their own behalf to resolve the problems. These have been key elements in the criticisms that have been levelled at the television coverage of the Ethiopian famine.

Ethiopian News

Michael Buerk's first report on Ethiopia in July 1984 went as follows:

> There is a simple and a complicated truth about what is happening here. The simple truth is that the rains have failed. The complicated truth is that the land can no longer support the number of people on it.

Writing in *The Listener*, Brian Phelan commented:

> In other words, it is a natural disaster in which over-population has conspired with the weather to produce a major tragedy. The implication is that it has little to do with us, watching at home. It is, rather, an Ethiopian problem of too many people on too little fertile land. This is a well-trodden stereotype of the Third World, hardly likely to create a stir.[31]

But in fact, Michael Buerk's first report and *Seeds of Despair* did raise over £9 million in donations. We might note then, that even the simplest description of the effects of a famine does have some purpose. The showing of the terrible pictures of suffering plus a simple appeal to Christian values of fellowship and 'love thy neighbour', was an important and highly effective way of mobilising a response within television audiences. The impact of Michael Buerk's second report in October 1984 was heightened on BBC news by juxtaposing it with a commentary on the European grain mountain. This theme was then taken up by other media commentaries and carried clearly political overtones, by raising questions of allocation of resources and consumption in the West relative to the Third World. The account is still simplistic in the sense that Africa's problems could not be solved in the long term by simply moving the grain mountain from Europe to Africa, but it was an important beginning. Some current affairs programmes went beyond this to openly question the political issues which underpinned the famine. A *World in Action* programme on the 'Politics of Starvation' began as follows:

> Tonight with the people of Ethiopia in desperate need 'World in Action' reveals a growing conflict between those who have been trying to get aid to Ethiopia and the politicians who, they say, refused it. It's what's becoming known as the Politics of Starvation.[32]

But programmes such as that by *World in Action* were exceptional. Michael Poole argued that the typical images of starving people, moving as they are, inadvertently misrepresented the nature of the problem. Television images, he commented:

> ... shared one thing in common: they presented the Ethiopians pouring into Korem and other centres in search of food as the victims of some 'natural' disaster, like an earthquake or a flood. A perspective also shared by most of Fleet Street. The vocabulary chosen by 'The Daily Express' was especially revealing in this respect: 'drought and starvation have taken up residence once more in this impoverished, cursed land... A malevolent Nature can be thanked for this'. In fact, what has been happening in Ethiopia, though drought has undoubtedly been the catalyst for it, is really of a different order in so far as it was predictable - was indeed predicted - and could therefore have been averted... As Oxfam put it in their almost totally ignored July report warning of the danger of widespread famine in the northern provinces of Wollo and Tigre: 'poor people live at the margin of existence even at good times; the weather can easily tip them over ... because it's the weather that tips the balance, it is easy to assume that it is the main cause of disasters such as famine. But the weather doesn't cause poverty. It merely focuses attention on it'.[33]

News Impact

We can assess the impact on television by simply looking at the number of stations which carried the story in its different phases and at the potential audiences which they could reach. The first Michael Buerk report on the famine in July 1984 was syndicated to 63 television stations by *Visnews*.[34]

The Buerk/Amin report in October 1984 was carried by 425 of the world's broadcasting stations, with a potential audience of 470 million people.[35] The story was taken up in the popular press and then given a huge further impetus by the intervention of Bob Geldof. His 'Band Aid' record was released for Christmas 1984 and he then toured Ethiopia in January 1985 with a plane load of journalists. This movement climaxed in July 1985 with the 'Live Aid' concert, which was shown in 120 nations with an estimated audience of 1,500 million viewers.[36] In May 1986, 'Sport Aid' was staged as a deliberate 'consciousness raising' event, to involve large numbers of people in simultaneous athletics to demand action for Africa. 274 cities in 78 countries around the world staged simultaneous runs involving in all up to 20 million people worldwide. Perhaps because of the non-participation of the USA, it was less of a television event, being picked up by 49 television stations in 47 countries.[37]

Impact on Governments

News pictures from October 1984 and the public interest that they aroused had some impact on the pledges for immediate food aid by governments.

The US Government announced that it was adding $10 million to its existing commitments, while the British Government announced that it was adding £5 million and 6,000 tons of grain to Ethiopian relief efforts. The Western television reports also influenced the

Soviet Union. As an ally of Ethiopia it had thus far supplied mainly military equipment, but it now announced that it was sending 400-500 trucks, 16 planes and 24 helicopters to distribute foodstuffs.[38]

These levels of aid came nowhere near to meeting the actual needs of Ethiopia either in terms of immediate relief or in providing long term development aid but Government aid had unexpectedly become a hot political issue. In November 1984 *The Observer* broke the story that despite the British Government's rhetorical support for assistance to Ethiopia it was planning to cut its overseas aid budget. In the event, there was a backbench revolt in the British Parliament and it is a testament to the power of the moment that the proposal to cut aid was voted down.

Public Impact

One way of measuring the impact on the general population is by looking at the increases in charitable donations. In the case of Oxfam, in the year from May 1984 to April 1985, the total donated was £51 million. In the previous year the total donations had been £23.9 million and in the year after April 1985 the donations were £45.2 million. Other charities such as Save the Children and Christian Aid also experienced dramatic rises in donations. All this was additional to the extraordinary fund raising efforts of 'Band Aid', which by September 1986 had raised $110 million (excluding 'Sport Aid' donations).[40]

There was also a huge increase in the number of enquiries to government departments and charitable organisations such as Oxfam. The switchboard at Oxfam was jammed for three days after the Buerk/Amin reports, while the other charitable agencies also reported similar increases in public concern. It is difficult to assess whether the media coverage of 1984 and its aftermath had any major effect upon beliefs and opinions within the general public. One of the problems is that Aid and Third World issues have been judged traditionally to be so low on the political agenda that there is very little data compiled on what people actually believe. The Harris Research Centre told us that such issues were not judged to be in the 'top ten' questions to be asked. However, it did seem clear that since 1984, Aid and the Third World have now taken on a much higher profile, and a senior researcher for Harris told us that in his view it would now be much more difficult for politicians to ignore the issues. More concrete evidence comes from Oxfam which commissioned a Nielsen Research Poll in the UK in November 1984. They found that 74% of the public thought that the main purpose of British government Aid should be long-term development projects.

On the surface these figures suggest a much higher level of

commitment and knowledge amongst the public than had hitherto been believed by either politicians or broadcasters. Michael Buerk commented:

> Everything about the British and other publics proved to be wrong. I remember talking to NBC, who also ran the piece and had this amazing reaction; they told me: 'It'll only last a week; the American public will soon get bored with that sort of stuff'. I almost agreed with them at the time, but they proved to be terribly wrong.[41]

The extraordinary impact of the story may well be explained by the interaction between the news and the Band Aid/Live Aid/Sport Aid events. These events provided a further rationale for extending media coverage and acting in tandem with the news, and they generated what was an almost unique national audience.

3. Conclusions and Proposals

The Western Media did not have a very deep interest in the issue of famine or a sustained commitment to explaining its causes. Once the disaster had reached catastrophic proportions in Ethiopia, the BBC took the story and finally treated it as a major issue. But it was in conditions which owed something to chance and even then, some of the biggest organisations actually turned down the story. The final assessment depends on what we mean by the Western Media. If we mean by it a few individuals, such as Mohamed Amin of Visnews and Mike Wooldridge of BBC Radio and the programme makers such as Charles Stewart and Peer Gill, then of course there was interest. There was also a smattering of news items through 1984. But if we take 'interest in the Western Media' to mean the commitment of major resources by major organisations, then this simply did not happen until the tragedy had already struck. On 23 October 1984, the day on which the Buerk/Amin Report was first shown, the BBC offered a full set of pictures to *The Sun*, the largest newspaper in Britain with 11 million readers. The response was: 'We're not actually interested in famine'.[42]

Five days later, when the story had broken, *The Sun* ran two inch headlines on:

> 'RACE TO SAVE THE BABIES'[43]

We can share some of the despair of Peter Cutler, a relief worker, who returned from Ethiopia in September of that year after assessing the state of food supplies:

> I remember coming back in September 1984 and literally giving up. We were just banging our heads against a brick wall. I'd tried all the donor agencies and the media. People were sick of my going on about it.[44]

How could these patterns be changed in the future and how could the Third World be given a stronger voice? We would make the following proposals.

When funds are provided to news and documentary companies on an editorially independent basis, development issues can be investigated and broadcast. One major problem is exchange of information from the Third World to Western audiences. South to South programme exchange is very rare whilst South to North is virtually non-existent. A major step forward in this area would be the establishment of an international Clearinghouse on environment and development audio-visual materials.

A Clearinghouse could work strategically through existing systems to create networks of concerned film-makers, television producers and user organisations and service these information and audio-visual material. Suitable goals for such a Clearinghouse would be as follows:

(i) the creation of a database on film and video relating to development and environmental issues;
(ii) the development of a distribution system and network for environment and development films for Third World Television and for international non-theatric distribution;
(iii) the production of news features and low-cost programmes principally by Third World programme-makers analysing topical environmental issues;
(iv) the organisation of workshops and seminars designed to brief broadcasts on environmental issues and to identify programme-makers in the South to cooperate on co-productions;
(v) award fellowships to Third World film-makers by way of grants;
(vi) the production of special versions for specific audiences possibly crossing language and cultural differences through appropriately sensitive editing;
(vii) the provision of key and important films for NGO seminars; and
(viii) cooperation with international and regional organisations such as UNESCO and the Asian Broadcasting Union.

References

1. UNESCO (1980) *Many Voices One World.* Report of the international commission for the study of communication problems, pp 36 and 180.

2. Johnson, R. (MP), 22 November 1984.

3. Magistad, M. (1985) *The Ethiopian Bandwagon.* University of Sussex unpublished M.A. thesis.

4. Although in the USA NBC did a news report on 25 May on how 3 million people were already affected - cited in Magistad (1985) op cit.
5. *Time*, 12 Nov. 1984.
6. Phelan, B. (1985) *The Listener*, 28 Feb.
7. Interview with Mohamed Amin, 17 Sept. 1986.
8. ibid.
9. Interview with Joe Angotti, 25 Sept. 1986.
10. From Magistad (1985) op. cit.
11. Harrison, P. and Palmer, R. (1986) *News out of Africa*, pp 106-113. Hilary Shipman, London.
12. Interview with Michael Buerk, 22 Sept. 1986.
13. Dimbleby, J. (1984) 'Murder by Neglect' *The Mail on Sunday*, 28 Oct.
14. Quoted in Phelan (1985) op. cit.
15. Glasgow University Media Group (1976) *Bad News*. Routledge and Kegan Paul, London.
16. Interview with Brendan Farrow, 17 Sept. 1986.
17. Cater, N. (1985) 'The Hungry Media' *Ten: Eight Quarterly Photographic Magazine* **19**.
18. *The Economist*, Development Report, Not. 1984.
19. Interview with Michael Buerk, 22 Sept. 1986.
20. Quoted in Magistad (1985) op. cit. p 87.
21. 'The Television Pictures that Shocked the World' *Visnews*, 30 Nov. 1984.
22. This is further illustrated by the spasmodic way in which stories can be taken up and then left. For example, the BBC's *Newsnight* did 3 reports on famine in April and May 1984 (cited in Magistad, 1985). In June 1984 ITN showed parts of a film made by Mike Doheny and Paul Harrison for the Irish charity *Concern*. In July, ITN featured the Ethiopian government's appeal to the West for help. In early October 1984, *Save the Children* gave a press conference with fieldworkers who had just flown in from Ethiopia and who were able to give graphic accounts of the disaster. ITN carried an item on its news about it, and in effect had the story which was launched with much greater impact later in the month by the Buerk/Amin report.
23. Quoted in Freedland, M. (1985) 'Horror story that no-one wanted to hear' *TV Times*, 20-26 July.
24. Quoted in *The Listener*, 28 Feb. 1985.
25. UNESCO (1980) op. cit. p 159.
26. Laishley, J. (1975) 'The Images of Blacks and Whites in the Children's Media' in Husband, C. (ed) *White Media, Black Britain*, pp 82-83. Arrow, London.
27. Laishley (1975) op. cit. pp 84-85.

28. ibid. pp 72–73.

29. Tully, M. (1986) *The Black and White Media Show*, BBC, 27 Aug.

30. Simpson, A. (1985) 'Charity Begins at Home' *Ten: Eight Quarterly Photographic Magazine*, **19**.

31. Phelan, B. (1985) *The Listener*, 28 Feb.

32. *World in Action*, 12 Nov. 1984.

33. Poole, M. (1984) 'The Natural Disaster that Wasn't' *The Listener*, 8 Nov.

34. *Television Weekly*, 27 July 1984.

35. *The Times*, Special Report, 13 March, 1985.

36. Figures supplied by *Band Aid*.

37. Figures supplied by *Sport Aid*.

38. *Time*, 12 Nov. 1984.

39. *The Observer*, 18 Nov. 1984, quoted in Magistad (1985) op. cit.

40. Figures from Oxfam Press Office and Band Aid. Television was central as a supplier of information. 97% of those who contacted the Sport Aid Telethon got the number from TV rather than the Press.

41. Michael Buerk quoted in Harrison, P. and Palmer, R. (1986) *News out of Africa*, p 130. Hilary Shipman, London.

42. Quoted in Harrison and Palmer (1986) op. cit. pp 100–101.

43. Quoted in Magistad (1985) op. cit. p 102.

44. Quoted in Gill, P. (1986) *A year in the Death of Africa*. Paladin, London.

Chapter 3

CRITICAL FILM ANALYSIS AS ENVIRONMENT AND DEVELOPMENT EDUCATION*

Alan Jenkins

Introduction

Much of our knowledge about societies and the environment comes to us through the media. Furthermore, any education that takes development questions seriously must provide some understanding of Third World countries. The role of the media is particularly important in the case of Third World societies because many of us in the West will never visit them. Indeed, television companies have responded to the fact that documentary films about non-Western societies have a definite appeal for large audiences. Yet from an educational perspective a problem arises in the way the media is conceptualised within pedagogy. In this chapter we will be concerned only with film media.

One common problem with education through film is the assumption that film is a 'transparent' form which directly replicates the real world. This is the assumption with which geography courses, for example, are working when they use film as essentially illustrative material. It is also an assumption that may allow the film medium a deceptive power *over* the viewer instead of educational empowerment *for* the viewer. This is because the information conveyed by the medium is a highly selected, socially constructed reality and the view offered may be ideologically based serving a particular set of interests and values. The processes of making films - the selection of content, the tone of presentation and the technical manipulation of

*Aspects of this chapter previously appeared in Alan Jenkins (1986) 'Disappearing World Goes to China' *Anthropology Today*, 2, (3), pp 6-13, Alan Jenkins (1988) 'Granada Television Goes To China: the choice of Locations and Characters' *Visual Anthropology* 1, pp 453-273, and Martyn Youngs and Alan Jenkins (1984) 'Shell Shocked: Critical Film Analysis and Teaching Strategies' *Geography*, pp 46-53.

pictures and sound - make film a medium which powerfully shapes the reality presented to the viewer (Clark, 1977). Thus, one of our best hopes, of offsetting the potentially deceptive aspects of the medium is to educate the viewer about how social, political and technological processes influence the final film product. As Masterman (1983: p7) puts it: 'the case for media education must rest upon the idea that the media are actively involved in constructing 'reality' rather than neutrally transmitting it'. Indeed, on the assumption that education should enable people to be critical participants in society, the ability to analyse media messages and 'film literacy' (Forsdale and Forsdale 1966) become important ingredients for the curriculum.

The purpose of this chapter is to explore in further detail the educational potential of critical film analysis by references to two case studies. The first case is an appraisal of several Shell film documentaries on the British countryside. The second case is an analysis of the production of a television series of documentary films on China derived mostly from interviewing those involved in making the films. Recent events in China and their intense media coverage in the West perhaps make this case study of particular significance.

Shell UK and the regions of Britain

In the mid and late 1970s Shell UK made and distributed a series of films on the *Regions of Britain*. These films are important for various reasons. They can be easily incorporated into the traditional syllabus on the regional geography of Britain. Indeed there is a danger that they could be used there 'transparently' as basic illustrative material. Also these films have been widely used - for example, they have been advertised in *Education Guardian* and discussions with personnel at the Shell film library indicate that they have been used by a whole variety of interest groups from the Scouts to the Women's Institute. Certainly schools and colleges have made major use of them, particularly teachers of secondary school geography.

Each film portrays a specific region, namely, The Essex Coast (1976), The Cotswolds (1976), The Peak District (1976), the Welsh Marshes (1977), The North-West Highlands (1977), and The Fens (1977). The films clearly fall within the idiographic view of geographic space. Both the *Shell Film Catalogue* and the films themselves attempt to specify that these areas are special and individual. For example we are told that the North-West Highlands has 'a strange music, created out of precipitous mountains hard against a warm moist coast, where a different race speaking their own Gaelic language persists in surviving' (Shell, 1982, p 20). At the beginning of each film a map of Britain is presented with the region under study outlined. The camera zooms in and the map is transformed into a

physical relief map with population centres indicated. However, the regions selected are more than just special or different. They are not the regions or places of industry and dense population; they are not London, the West Midlands or the North-East of England. The areas selected are largely tourist or recreation regions; places we visit, places we 'go and see'. The Peak District film, we are told, will show the 'spectacular scenery of the district, from the rugged hills in the High Peak to the tranquil beauty of Dovedale in the south....' Whilst the '... Cotswolds can be seen very clearly from the Severn Vale....' (Shell 1982, p 21).

I want to suggest a way of critically analysing these films. The point is not that there is only one way of doing such an analysis, but rather to bring out certain pervasive, if not dominant, aspects of the films which serve to persuade the viewer to adopt a particular and somewhat deceptive image of the British environment. The analysis I propose revolves around the following five categories: (a) visual - picture postcard appeal; (b) tourism - country from city; (c) rural craft not labour; (d) harmony not conflict; and (e) ahistoricism.

Visual - picture postcard appeal

Philosophically these films draw on a modified romantic version of the landscape. They entertain ideas of the picturesque and the sublime. The film on the Cotswolds opens with the camera taking us down green hedge lanes and bird song can be heard and a harpischord plays 'Elizabethan' music. The narrator tells us that the 'careful planting of deciduous woodlands added to the charm and beauty of the scene' whilst further on we are informed that 'even the smallest village achieves a visual accord with the landscape'. Dovedale in *The Peak District* is '... a gorge exquisitely lovely and grand....' The sound track here is a pipe playing and doves cooing - in the background a cuckoo can be heard. The picture is of water bubbling by and the sun dancing on its surface. Trees gently sway on the banks. All is romance and charm. 'Montgomery is a drowsy backwater with its Tudor, Elizabethan and Georgian houses round the charming market square' (*The Welsh Marshes*). Spalding (Lincolnshire) is portrayed as 'a charming market town' (*The Fens*). This is myth-making in action and it represents a flight from reality. John Fowles (1980) has warned that the greatest threat to the English countryside is that we simply fall in love with the 'look of things'. Howard Newby (1980a) has asked how can we warn of the decline of rural social services, of low education provisions, of poor transport, of unemployment and poverty (not to mention widespread environmental pollution), when these pervasive pretty pictures have to be contended with. The only partial exception is found in *The North-West Highlands* which at least does mention the problems of depopulation but offers no explanation.

The films are also romantically inclined in that they adhere to the aesthetic of the sublime. The obvious film where this interposes between reality and the viewer is in *The Peak District.* The wind blows and the crags pass by the camera, and we are told that this is a 'desolate craggy countryside'. This, however, is an objective statement compared with the narration that beyond the South Peak 'There is nothing but bleak moorland. A countryside of Peak and heather and cotton grass (pause). Of grazing sheep and mountain streams. A countryside uncivilised by man'. We almost feel that this is the High Sierra or maybe the Rockies rather than a few miles from Glossop!

Tourism – country from the city

The visual aesthetic is an urban perspective and is not like the more functional aesthetic of traditional country workers. As Newby (1980b, pp17, 169) comments 'the beauty of a faultlessly drilled seed-bed, healthy stock or clean weed free fields... They maintain a functional aesthetic which is totally at variance with the prevailing urban view'.

These films are travelogues. 'We' visit Chatsworth House, Speedwill Cave and the Blue John Mines in *The Peak District.* Castleton is merely a good place to explore the Peak from – it has, we are told, a 'stream and homely cottages'. *The Fens* was supposed to be dealing with the landscape of 'work-a-day-man'. However, we seem to spend most of the time visiting places like Crowland Abbey, Ely Cathedral and, of course, the Spalding Bulb Festival. In the *Essex Coast* there is continual tension between having to portray the docks of Tilbury and Shell-Haven and wanting to 'visit' the 'nicer bits'. This comes across to the viewer as an emphasis on the rejuvenating qualities of the countryside. All the time the hustle and bustle of modern life are counter-pointed with harmonious nature: 'The sea-front at Leigh-on-Sea looks peaceful and serene. Commuters head to Fenchurch Street for another day of locked-up life ... city pavements, oblivious of the freedom just outside their carriage'. At the weekend people 'leave behind them the tensions and confusions of the working world' (*The Essex Coast*). The countryside is not seen as a working environment of hard manual labour but a happy playground of contented arcadians.

Rural craft not labour

You can't have industry spoiling the countryside. As an illustration, in *The Cotswolds* we are told: 'The industrial revolution passed the Cotswolds by leaving it as a purely agricultural area (and the) rolling hills were unspoiled by industrial growth. (pause) The villages were carefully preserved by the big landowners.'

In a sense this is the relationship of the films to labour – it must be

small scale and preferably quaint crafts. The countryside is and must remain unspoilt by industrial growth. Furthermore, even agricultural labour appears virtually absent. Fields are beautiful but nobody appears to be tending them. Quarrying is touched upon in *The Cotswold* but we quickly move on to dry-stone walling. Fishermen are portrayed in *The North-West Highlands* but the impression given here is the romantic notion of man's struggle against the sea. Nothing is said of labour and its relations to the owners of the vessels and those who will purchase the catch. It is isolated from commercial pressures. Finally, in *The Peak District* we are shown well-dressing at Tissington where in the 'old smithy the skilled local hands' work. Tissington is portrayed as a quaint little place with 'olde world' charm and customs. An idyllic labourless existence.

Harmony not conflict

Implicitly the films suggest that all is well and peaceful in the 'garden'. The inner cities may be decaying and unemployment rising but in the countryside all's right with the world. In *The Cotswolds*, for example, points are made about conservation and also 'the changing population which brought artistic and professional people'. Legislation requires buildings to be in harmony with the environment. Furthermore, it is thought a positive good that no industry, not even light industry, has despoiled the Cotswolds. Why should the viewer question this since few of us ever do? Yet all of the above can cause tension within the countryside. The British countryside is a living, goods-producing factory not a picture on a chocolate box. The tensions between established residents and newcomers can be defined in the sense that they compete for the same scarce resources. This is especially true in the case of housing with prices far outstripping the ability of many local people to pay. Agricultural workers may be forced to take tied cottages and others may have to leave the area. The planning regulations on visual accord and density can further inflate prices.

A further conflict may arise between those who wish the countryside to remain 'unspoilt' and therefore unindustrialised and those wishing to spread high paying jobs in the countryside. Farm workers' wages remain low, about 35 per cent below industrial manual and non-manual wages (Winyard, 1982). There remains the myth that it is cheaper to live in rural areas but on close examination this is absurd. There are no supermarkets, for example, and it costs a lot to travel by car and bus (if there still is one on an alternative Wednesday and Saturday). Winyard (1982) has suggested that probably the easiest and quickest way to increase farm workers' wages is by the introduction of, for example, a small engineering works in a rural area. This would not only ameliorate unemployment but also push

the price of labour up to reasonable levels. All is not, therefore, as well in Arcadia as the films might have us believe.

Ahistoricism

'Exciting, mysterious and full of history, say those who know these 60 odd miles of coastline, creek and river' (*The Essex Coast*). What is this 'history' they talk of? It is not a history of everyday people but rather of great *men* doing great things and 'building' great houses and monuments. It is a type of history that has largely been rejected as a method by historians, who have not been the same since Edward Thompson's *The Making of the English Working Class.* In this he quarrelled with those who 'tend to obscure the agency of working people, the degree to which they contribute by conscious efforts to the making of history' (Thompson, 1976, p13). In the Shell film the Cotswolds are portrayed as a land of wool merchants getting rich, building houses and endowing churches. Where did the money come from? The Welsh Marshes is virtually an Arthurian land of war lords marching to and fro. The Fens were drained by a Dutchman - did he really dig the Bedford Level on his own? The Peak District is uncivilised and negates the agricultural labour that has recreated the present landscape. The Essex Coast is a land of forts and castles and the Highlands a region of Gaelic myth.

However, most of all it is *implicit* within all the films - it is an underlying unquestioned cultural assumption. It is a failure to comprehend that the British countryside has been organised around distinctive agricultural economics. What exists in the countryside is dependent on that historical fact. It never was an Eden but a land economy based on work, poverty, exploitation and constraints imposed by the locally powerful. Behind the facade of a happy 'organic community' this darker image always lurks but to bring it to the forefront would threaten the idyllic conception of rural life. The rural life as an escape from urban squalor cannot be allowed to be squalid itself (Newby, 1980a, p24).

Granada Television Goes Inside China

The two films analysed here were part of a three part *Disappearing World* series entitled *Inside China* and were filmed near Wuxi in Jiangsu province, inland from Shanghai. They were shown on the independent television network at the peak viewing hour of 9.00pm on two Wednesdays in April/May 1983 - each 52 minutes long. (The third film entitled *The Kazakhs* will be only mentioned briefly). The series had a significant impact as indicated by the fact that after being shown on British television the three films were purchased by television companies in 24 other countries.

Implicitly, if not explicitly, the films raise questions about the

nature and implications of various development approaches followed in China. Precisely how these questions are raised, however, is not unimportant. In the words of the script the films are 'a story of China's revolutions told by ordinary families whose lives have been shaped by the successive waves of change.' Feudalism, starvation, Japanese invasion and oppression, communist conquest, collectivization ... all have affected their lives 'and today, they are living through what may be the most far-reaching changes of all'.

The films tell this story through the lives of three families who live in two communes near the city of Wuxi. The first film *Living with the Revolution* focuses on life before and after the communist revolution of 1949. The film's form is that of an oral history, with individuals from these families telling their story direct to camera. Through them we build up a picture of the horrors of Japanese invasion and the development after 1949 of collectivized agriculture, rural industries and the clashes of the Cultural Revolution. The testimony of one family, the Dings, and especially of Mrs Ding who becomes a commune leader, is particularly prominent. A central theme of the film is that of change, of a succession of 'revolutions' that have transformed these people's lives. But while change has occurred, there are also cultural continuities. These themes of continuity and change are illustrated by looking at the courtship and marriage practices of the different generations. Thus a subplot of one of the films is that the Dings' younger son, a university graduate working in far off Tianjin, has returned home on holiday while his family seeks a potential bride for him.

In contrast to the largely diachronic *Living with the Revolution*, the second film *The Newest Revolution* takes an essentially synchronic view. Its focus is the impact of post-Maoist economic and social policies on these people's lives. In agriculture there is the move to the family-centred responsibility system, and generally there is encouragement of a new materialism. Thus materialism is seen as threatening traditional values such as respect and caring for the elderly and the more recent values of post 1949 socialist development. One of the film's most striking images is a group of young women rehearsing a song for National Day celebrations. The song includes the refrain: 'We exchanged our chickens for a recorder. We exchanged our chickens for a TV ... A recorder, a TV, a camera and a washing machine, don't you think this is wonderful?'

Motivation and Access

Why was a *Disappearing World* series made in China? One reason is that Granada was one of the many Western television companies competing for the right to film in China after the death of Mao Zedong in 1976 when the Chinese authorities began to make access to the country more open for the West. A second reason is that

Granada's Managing Director Sir Denis Forman considered that 'China is a place of immense importance ignored and grossly underestimated by most of the rest of the world', and that it was Granada's responsibility to make films about that society.

Obtaining access required extensive negotiations with embassy representatives of the People's Republic and with organizations within China. For Granada access was partly obtained through Central China Television (CCTV) having bought a previous Granada drama documentary. This had involved a professional meeting in Beijing between the Director and Producer of the drama and CCTV personnel who wanted to know how it had been made. Out of this grew meetings between Granada and CCTV in both Beijing and London including a visit by Sir Denis Forman during which he explained that Granada was 'anxious to make a programme, to establish a long term relationship with China television'. After the resolution of substantial differences over the fee that Granada should pay the Chinese for filming, Granada indicated an interest in making a range of programmes including a drama documentary about the trial of the Gang of Four, films about contemporary China and 'ethnic films'. By 'ethnic films' Granada meant films in the Disappearing World style. From this range it was the Chinese authorities who suggested Granada make a series of 'ethnic films'. The reason for this is a matter of speculation but Andre Singer, the Series Editor, thought that it was probably because they 'wanted to propagate their minorities policy as being liberal in comparison with Russia in particular'. Whatever China's reasons for this decision it was to shape considerably the framework in which the location and individuals were chosen.

Which programmes to be made

Series Producer Andre Singer argued that Granada should make three films in contrasting minority areas. Other television companies now had access to Han China, whereas Granada had 'specific access to minority areas'. Singer's view had to be negotiated with programming executives with concerns for a wider range of programmes. As Executive Producer and head of features, Stephen Morrison (and other executives at this level) took the view that having obtained access to China, one should capitalize on that access and show the audience something of what they considered China to be. An amicable compromise was achieved - there would be two films made in minority areas and one in a village community in Han China. Commenting later on this decision Singer stated that 'already the film is being geared to a stereotyped choice rather than our own'.

After this compromise had been achieved there were major problems in deciding the three films' locations. All were to be made according to the conventions of *Disappearing World*. This normally

involved an academic anthropologist/sociologist working as a full member of a film team and generally using their knowledge of an area and people to shape the film's locations and themes. However, in the case of the People's Republic this presented a major problem. Western academics had very limited access to Han China or the politically and strategically sensitive minority areas. Academic anthropology and sociology were only just being resurrected in China so there was little work to draw on there. The Granada view was that it was generally desirable for the academic consultant to be a Westerner and one well versed in Western ways, for one of the central functions was to act as a 'cultural interpreter' between the host community and film team.

The dearth of detailed anthropological studies in part presented a problem but in a way it also widened the possible choices. Andre Singer was drawn to filming an Islamic community, particularly the Kirghiz. He had filmed the Kirghiz in Afghanistan and in Pakistan and he thought it would be fascinating to film their counterparts in China. Others in Granada opposed this - the Kirghiz had been 'done'. Agreement was achieved on filming the Kazakhs, another large scale Islamic group, in Sinkiang. Then there was a search for a contrasting minority people and location. Singer and Morrison, helped by researchers' enquiries, decided on filming a slash and burn tribal group in Yunnan. A number of possible groups were identified. CCTV agreed and the final choice of group would be made in a week or so before filming. However, this film never got made and the reason for this is important because of what it tells us about anthropological filming for a large television company.

To Singer, and others before him who had been full-time employed on *Disappearing World*, the ideal would be a small team of specialist directors, researchers, cameramen/women and sound recordists. This would give them the expertise in a particular kind of film making, where the aim was to get closely involved with the people being filmed yet at the same time to film unobtrusively. Contemporary technology made that easier, for the small portable cameras allowed that style of filming. One could make such films with a small crew, one cameraman/woman, one sound recordist and no electrician. However, this 'ideal' clashed with others' interests and ideals. Being a researcher or production assistant etc. on this series was a prized assignment - on a prestige series and exotic locations. Thus there was pressure both within the company and from the unions to rotate these jobs around. So a permanent team was not established. Moreover, there was also pressure from personnel and unions against the small crew principle of this series. The unions in an attempt to protect jobs and to widen opportunities viewed the 'small crew' with some displeasure. There had been repeated conflicts within Granada over this issue (Henley, 1985). There was pressure

wtihin the company for such films to be made with a full crew, using two cameramen/women etc. For the three films in this series on China a compromise was initially established. The two films in the minority areas would be made by different production teams but both using a small crew. The third film, the one in Han China, would be made with a full crew, though it was to be hoped, living amongst the host community.

However, this agreement broke down. The conflict appears to have been that there were repeated demands that the film in Yunnan be made with a full crew. Granada officials refused this, insisting that the film be made with a small crew. Meanwhile the deadline of the agreement with CCTV was running out. The film was cancelled. In fact, at this time Granada cancelled the whole of the *Disappearing World* series. Whatever its prestige, its quality ... financial troubles within independent television caused Granada to cut the series and Singer to leave the company. Furthermore, by the time the film in Han China was being shot it was becoming clear tha the film in Yunnan would not be made and this set up a pressure for the one film in Han China to be turned into two.

Choosing the location for the films to be shot in Han China was shaped by a number of linked considerations. The ideal location would be a Han village community. It would be filmed according to the conventions of the series, a close observational study of a small number of individuals and themes which illuminate wider issues about that society. Ideally, these people and themes would be shaped by a prior detailed village study and ideally an anthropologist/sociologist would guide the team in that location. The problem was that there had been very few village studies in 'mainland' China. The researcher, Claire Lasko, and Andre Singer discussed the alternatives with a number of academics while also looking for an academic consultant. Though a few other locations were considered Andre Singer's knowledge of Fei Xiaotung's classic study done in the 1930s of a village in Jiangso Province considerably influenced the decision that was to land Granada filming near Wuxi. To Andre Singer the attraction of this village was that 'we wanted a body of data that we could build upon, we could follow through. We had characters already on paper. We could choose the same characters, see what had changed and so on'. To Leslie Woodhead who was to be the films' director, the book 'was an unusual godsend, a goldmine in terms of prior research into understanding in detail a place, as a springboard for making a film of how this area had changed'. Granada pressed for this location. CCTV were eventually to state that 'suitable accommodation was not available'. Instead they offered another similar location some 40 miles away.

Claire Lasko was centrally involved in choosing the location and consultant and her role was even more important because the film's

director, Leslie Woodhead, at this stage was completing another assignment. As she puts it, the decision as to where they were to go 'came very, very late on, no more than a few weeks before we left, and no way did we actually know where we were actually going, and that obviously was a major drawback.... The Chinese Authorities told us it was near Professor Fei's place.... Being true to the *Disappearing World* tradition we felt that that in itself was not good enough, because you can't just apply data from a place nearby, you really want the place itself.... But *we were assured and we said it was an absolute major stipulation that it would be a countryside area and they assured us it was*' (my emphasis added).

Meanwhile Granada searched for an academic consultant who knew a lot about village China and who could be avilable at the required time. Contacts amongst the academic world led to Barbara Hazard whose research had specialized on peasant/state relations (Hazard, 1981). However, she had neither worked in the particular area nor could she speak or readily understand the dense local dialect. In the week or so between being hired and leaving for China, she was to take a crash course in the dialect and insisted that CCTV use a local interpreter. It is notable from this account that there has been a slippage from the 'ideal' form of the series to accommodate a whole set of pressures. As we look at the experience of filming, these pressures will take their effect and others emerge to impact upon the 'representation' offered the viewer.

Circumstances of filming and cultural conflicts

The film was made according to the accustomed professional practices of the industry. In autumn 1982 an advance team was to survey the location for themes and characters. Two or three weeks later they were joined by the rest of the film crew. On arrival at Wuxi the advance group encountered a variety of problems. Firstly, they had not obtained access to detailed anthropological data nor an anthropologist who knew the local people. Secondly, the 'chosen location' was a suburban area of Wuxi and one rapidly urbanising and industrialising. In no way was it the isolated peasant village that they had expected and been led to believe.

Moreover, throughout much of the filming they were to be accompanied by a set of Chinese officials whose role was to help them make the film. Interpreters were needed especially since the academic consultant did not know the area. But in a 'controlled society' like China, and one where the control of news was immediately linked to the political process (Chu, 1979), one can presume that the role of these officials was also to steer the film towards a favourable representation of China. Certainly the advance team were led towards a very model family containing a dynamic, photogenic party official - Mrs Ding.

These 'minders' as Woodhead termed them, initially 'stuck like glue' to the advance group and insisted on detailed day-by-day film schedules. Woodhead had not experienced this degree of control in previous films he had made in Africa. These Chinese 'minders' also had some difficulties in meeting Granada requests and these seemed to stem from their lack of understanding of the professional culture of western film crews. Thus during the early negotiations, after the Chinese had suggested and agreed to the Granada's making of 'ethnic films', Forman found that the Chinese 'thought that we were going to give money to tribal magicians, jugglers and acrobats to perform in front of the cameras. It took a long time to eradicate the idea we were not looking for performers. We were looking for people as they lived'.

Trying to film people as they lived was one of the central features of the *Disappearing World* series. From experience and professional credo they considered that by living amongst the people they were filming, with time they would be accepted. Evidently a film team affects that which is observed but such practices are considered to minimize the disturbance and allow the viewer to see something approaching everyday life. Thus Woodhead and co. continued to assert their wish to live on a commune floor. They were to remain ensconced in a de luxe Australian-built hotel in Wuxi some 40 minutes by car from where they were to film. Belatedly their Chinese hosts continued to express surprise that Granada was to take as long as five to six weeks to make the films. Indeed, a recent account by a Chinese journalist who acted as interpreter for a British film crew talks of conflicts between the British crew, the China Co. film group accompanying them and the people being filmed, as follows:

> Conflicts sometimes developed between the Britishers' desire to film real life in a natural relaxed way and the Chinese penchant for formal posing and for 'putting the best foot forwards'.... Part of the cause (of these conflicts) was simply cultural differences. But there was also a lingering fear on the part of some people about getting mixed up with foreigners at all. (Zhang, 1984, p26)

Academically these conflicts may be interesting but for the Granada team they posed major problems, which only added to those already faced, including a location which was anything other than their preconceived image of the China they would be filming. Indeed the difficulties faced by the advance group were so great that they nearly pulled out without making a film. However, they became convinced, as Woodhead stated, that within these 'constructed or supervised conditions ... given enormous patience it would be possible to get something which had some validity'.

Type of film – two for the price of one

But if circumstances permitted making a film of 'some validity', what

was that film to be? The original intention was to make an observational study of rural life probably focusing on just one family but seeing events through the perspectives of different family members. However, a close observational study of rural life was clearly impossible in that location. Moreover the advance group was surprised and overwhelmed by the changes taking place there. Industrialism and urbanization were apace and agriculture was being reorganised from the collective to the household or 'responsibility system'. Suffusing this was a definite emphasis on material rewards and materialist values. Woodhead reflecting later on these early days stated 'it took us quite a time to set aside our, if you like, sentimental preconceptions about village China and to admit village China doubtless exists over the horizon as a place we have not been allowed to see. Meanwhile we are at another place ... what is happening here matters'.

Thus the new story line which the advance group worked out for themselves and for their Chinese 'minders' was one that retained the oral history style but one which also emphasized change; a series of successive revolutions transforming these people's lives. This story was to be told not just through one family but through three contrasting families, one a family containing a party official (Mrs Ding) and from a more industrialized commune and two contrasting non-party and more rural families. Indeed the film's emphasis on change was so great that at some point one film was transformed into two, the first dealing with the transformation in these people's lives in the period 1930–1976. The second, *The Newest Revolution*, focused on the impact of post Maoist economic and social policies. Clearly a central question affecting the forms of these films is how did one film become two? This is not an easy question to disentangle because different respondents provided conflicting accounts.

One can see why the new policies probably well merited a separate film. They did throw up different themes for analysis and they did present different striking images. In terms of the audience's knowledge of China, they presented dramatically new images of contemporary China. Certainly during filming the Granada team became convinced they had stumbled across a fascinating story and Woodhead, the director, found himself shifting from 'aborting the film' to making one film of 'some validity' to seeing the possibility of making two films. To him the central reason for this changeover was the richness of the testimony they were obtaining from their informants and the amazing kaleidoscope of changes these people had and were experiencing.

Others involved in the filming see the issue somewhat differently. Their recollection, though varying slightly, is that at the beginning of the shooting it looked very likely that the first film would not be made and they recollect Woodhead discussing the possibility of making two

films out of the material. Yet throughout the filming they considered they were making one film. However, they perceived a pressure on Woodhead to make two films to make up for the space of the missing film. Certainly by the end of shooting it was clear that the third film in Yunnah was not going to be made.

In the cutting room Woodhead considered two options; either to make 2 linked 52 minutes films or one 90 minute programme. He favoured the latter option. His view had to be negotiated with series producer Singer and with the programme controllers responsible for setting up the network's schedules. Woodhead's recollection was that it was very difficult to persuade Morrison and Mike Scott, the programme controller, that there were two programmes in the material. They indicated to Woodhead that it was important for Granada to produce quality programmes and that one should not 'stretch the material' beyond what was readily there. It also appears that the solution of a 90 minute film, though discussed, came up against a scheduling problem of fitting it around other programmes. Singer commented that when he took the idea of a 90 minute programme 'to the next level ... (the) people who have to decide on where it slots into the network and that kind of thing, it was deemed impossible. We can't have a one hour programme (*The Kazakhs*) and then a ninety minute programme'.

So certain themes emerge: conventions of what is a series; problems of scheduling; and the difficulty and artifice of shaping what has been filmed. Moreover, though the films when viewed do have a logic as two linked films, certain problems have been created. The first film *Living with the Revolution* is careful to point to some of the limiting circumstances under which it was filmed. The second film *The Newest Revolution* echoes some of these reservations but very briefly. One must question to what extent the viewer who saw both films will bring to the second film the reservations stated in the first. Moreover, many people may just have seen the second film with its very limited reservations. It also appears that some of the material has been 'stretched'. Thus *The Newest Revolution* contains a scene of the party member, Mrs Ding, 'mediating' in a very complicated property dispute. Even though an hour or so of filming has been cut down to some 5 minutes of airtime the story is not very clear or revealing. Part of the reason for filming this event was that before the film crew came out, the advance team had witnessed a powerful mediation session which involved conflicts between families over property, and conflicts which could be clearly linked to recent policies. However, when the film team came out the mediation session under way had none of that intensity or clarity. One can doubt whether any of that sequence would have been used in one 52 or 90 minute film. So clearly making two films out of one has significantly affected what is offered to the viewer.

The programme form

What the viewer sees has been shown as the result of many factors, one of the most important being the form and conventions of the *Disappearing World* series. Though individual programmes vary (Loizos, 1980) there has developed a certain programme form that the film makers consider enables them to reach a large audience. Woodhead has described that form thus: 'Instead of trying to film all of society to engage the audience's attention ... [one makes] microcosmic films of the macrocosmic culture. In other words one looks for individuals who can articulate the most important things about their society but can be in themselves engaging and accessible to the audience.... What we have always tried to do is to concentrate on a limited group of people, one family, sometimes one individual or a couple of families in contrasting situations, and try to understand them and make them the spokesmen for their society'.

The films shot near Wuxi accord with this convention. Judging by the comments of the television critics *Inside China* was thought to have been engaging and accessible to the audience. A dominant theme in the television critics is their delight in individuals such as the Dings and the Zhus and the sense of common humanity revealed. As one critic put it, Granada 'travelled to China and found themselves in Coronation Street' (Banks-Smith, 1983). Singer acknowledged this as a strength of the programmes stating that various family relationships filmed made the characters 'into not Chinese but into human beings'. But this quotation (admittedly taken out of context) raises the question to what extent ethnographic films would emphasize common or distinctive aspects of humanity.

Certainly one way to approach an understanding of other peoples is to see aspects of homology with our own lives. This is particularly important in the context of past Western portrayal of China which has been very negative - a bleak, drab society force-fed on Maoist exhortation. Many television critics (and presumably the general viewer) were surprised at and engaged by what they saw in the programmes and much of that involvement came through the power of the individuals selected. However, this programme form carries certain dangers and weaknesses. One is that the average viewer may take these people as being representative of the whole society. Thus one television reviewer commented: 'An astounding fifth of the world's population live just like the people seen last night' (Rees, 1983). Yet the 'representation' offered by *Inside China* is shaped by decisions that brought the production team to a very particular location, and as Isobel Hilton (1983) argued 'this is not a "typical" Chinese countryside commune rather it is a suburban commune in one of the richest areas of China'. Elizabeth Wright (1983) observed that many of the people whom she had spoken to were completely taken in by the programmes: 'They thought it reflected absolutely the

daily life of ordinary, rural people, they really felt that because they had no yardstick with which to compare it'.

The individuals chosen were shaped by the limited time available to the advance team and exertions of the 'minders' in selecting 'model families'. They were also chosen to conform to the concerns of the medium for strong, articulate photogenic individuals. As Woodhead stated: 'some of the judgements one is making are frankly show biz judgements. You have got a limited amount of time on screen, you are always going to, for better or worse, choose the people who are going to use the time effectively'. On this point Jonathon Mirsky (1983) commented: 'They (the films) centre on the Dings, 'an ordinary family ... like hundreds of millions of others', which includes a woman Party official, a factory worker and an engineering graduate. They are not peasants, though they are of peasant stock - I mean there are four million university graduates in China - there happened to be one in the family. What an amazing thing!'

Thus the presence of 'charismatic' interviewees shapes the films' form. So do other conventions. This series made a dramatic breakthrough in ethnographic filming for a general audience. That breakthrough was for 'native' peoples telling their story direct to camera, rather than the then dominant convention of a Western presenter telling their story. However, this convention is also accompanied by a set of problems. In most of the films we do not see the anthropologist or the rest of the film crew. We do not hear their questions. Politically and aesthetically this furthers the sense of people from the Third World speaking directly to the Western audience. What we may forget is that we are witnessing a construction. The film uses the form oral history which has a particular cultural expression in China. In post 1949 China there is a ritualised way of uncovering and 'propagandizing' wrongs the Communist Party wishes to eradicate. People are required to 'speak bitterness' in public. Such demonstrations can be very moving. They may also contain much truth, but it is a 'truth' that may well be shaped to meet the accepted messages of the time. Nowhere in the two films are we warned about this cultural form even though it probably influenced much of what we see, particularly in the case of Mrs Ding who as a party official will have taken part in many such meetings. Though we cannot know what the average viewer makes of this aspect of the film, it must be noted that virtually all the television critics ignored or failed to see it. The exceptions were three China specialists who reviewed the series for the general press and radio (Hilton, 1983; Mirsky, 1983 and Wright, 1983). Each of them was very critical of the series and each of their criticisms in part focused on the issue of 'speak bitterness'. As Hilton (1983) argued, the films fail to treat 'the evidence presented critically. Part of the problem lies in the heavy reliance on people telling their life stories unchallenged'.

Conclusions

Visual media play an increasingly central role in shaping our vision of the world and the environment. Consequently we need to develop the critical tools by which to analyse our reactions and to form independent judgements about visual media. Specialist knowledge of the topic being 'represented' by the media will also be helpful but for most of us it will be more important to have sufficient insight into the social processes of the media to be able to ask critical and reflective questions set against knowledge already acquired. For example, the Shell UK films can be set against other visions of the environment using written sources such as Ronald Blythe's *Akenfield* (1978), Fred Kitchen's *Brother to the Ox*, and Howard Newby's *Green and Pleasant Land* (1980). The film *Inside China* could be contrasted with other films such as *Lawrence in China*, a not untypical BBC documentary which attempts to have an 'objective' look at varied aspects of China, and *Daily Life in China's Communes* which forcibly states the message that the Chinese peasantry through mass politics, unlike Stalinism in the Soviety Union, have positively changed their world. By reflecting on these alternative views we can more readily develop a framework for critically analysing our future 'consumption' of television and film.

References

Banks-Smith, N. (1983) 'Inside China' *Guardian*, 28 April.

Chu, G. C. (1979) The current structure and functions of China's mass media. In Chu, G. C. and Hsu, F.L.K. (eds) *Moving a Mountain: Cultural Change in China*. University Press of Hawaii, Honolulu.

Clark, M.J. (1977) 'Geographical film in higher education - some problems of application' *Journal of Geography in Higher Education* **1**, pp 53-60.

Forsdale, J.R. and Forsdale, L. (1966) Film Literacy *Teachers College Record* **67**, pp 608-617.

Fowles, J. (1980) Foreword in *The Sunday Times Book of the Countryside*. Macdonald, London.

Hazard, B.P. (1981) *Peasant Organisation and Peasant Individualism: Land Reform, Co-operation and the Chinese Communist Party*. Verlag Breitenbeck Soarbrucken.

Henley, P. (1985) 'British ethnographic film: recent developments' *Anthropology Today* **1**, pp 5-17.

Hilton, I. (1983) 'Chinese puzzle' *Sunday Times Magazine*, 24 April, 1985.

Loizos, P. (1980) *American Anthropologist* **82** (3), pp 573-592.

Masterman, L. (1983) 'Media education in the 1980s' *Journal of Educational Television* **9**, pp 7-20.

Mirsky, J. (1983) 'Life with the Dings' *Observer*, 15 May.

Newby, H. (1980a) 'A one eyed look at the country' *New Society* **53** (926), 14 Aug. pp 324-325.

Newby, H. (1980b) *Green and Pleasant Land*. Penguin, Harmondsworth.

Rees. J. (1983) 'Last night's view' *Daily Express*, 19 May.

Shell (1982) *Shell UK Film Catalogue*. Shell UK Ltd, London.

Thompson, E. (1976) *The Making of the English Working Class*. Penguin, London.

Winyard, S. (1982) *Cold Comfort Farm*, London Low Pay Unit.

Wright, E. (1983) *Kaleidoscope*, BBC Radio 4, 28 April.

Zhang, Zhimei (1984) 'A film about music and people' *China Reconstructs*, November, pp 25-28.

Chapter 4

EATING TELEVISION? CHILDREN, FOOD, AND THE MEDIA

Anne Karpf

The world according to orthodox health educators is a neat and tidy place. In it, adults and children live their lives on the basis of free choices made after carefully appraising information and commonly-agreed evidence. Knowledge is gained, attitudes change and, as a result, behaviour is altered. Mix this with beliefs in the malleability of children, the critical importance of reaching them when young, and the omnipotence of the mass media, and it's scarcely surprising that, despite volumes of counter-evidence, the orthodox health education community tenaciously adheres to its conviction that the media can alter children's food preferences and beliefs.[1]

The research tends to cluster into three groups. There are the studies claiming that television advertising encourages children to eat unhealthily. Already in 1973 Gussow[2] was monitoring the food commercials screened during children's TV programmes on the American networks, and finding a highly sugary message. The young TV addict, she concluded, is fed a diet of cereal commercials and is exposed to the least nutritious foods - the healthy ones being notable by their absence (when did you last see an advertisement for an uncrisped potato?). Watching television, she implied, helped give you a sweet tooth.

American studies on other health and medical issues suggested that children's heavy exposure to drug advertisements led to the following perceptions: people are frequently sick and frequently take medicine; relief after taking medicine is quick; and the feeling of recovery is much greater after taking medicine.[3] Researchers also found that the majority of children studied trusted nonprescription drug commercials,[4] and that the advertising of non-prescription drugs influenced the attitudes of children.[5] More recent American research makes similar claims about the mass media's influence in triggering teenage suicides after news stories about suicide,[6] and suggests that a high proportion of adolescents studied changed their

tampon use after extensive publicity was given to toxic shock syndrome.[7]

But there's a counter set of studies challenging this thesis. Lambo[8] argues that none of the existing evidence directly proves that commercials induce inappropriate food selection, while Rossiter and Robertson[9] suggest that in reality children and teenagers aren't strongly disposed to use proprietary drugs, and are only modestly influenced by their exposure to proprietary drug advertising on television.

Nevertheless, the belief in television's ability to influence children not only for bad, but also for good remains entrenched. So a third group of studies exposes children to advertisements for healthy foods to see if they thereby develop a yen for kidney bean casserole or for tofu instead of chips. Balfour Jeffrey et al[10] found, to their disappointment, that 'pro-nutrition' advertisements have hitherto proved ineffective in increasing consumption of nutritious foods. Their findings are only one in a whole international catalogue of mass media health education campaign failures, which again and again report a lack of significant or long-term behaviour change after costly, highly-visible programmes.

How do the campaigners account for the high hopes and discouraging results? Those broadcasters who've taken up the health promotion message with enthusiasm are clearly baffled by the mismatch between knowledge and behaviour. As the makers of the Channel 4 health series 'Well Being' recounted, 'The funny thing is that we often know that we are eating the wrong things, but carry on regardless. For instance, we asked some sixth formers in Barnsley to talk about their diet. They know that they ought to be eating fresh fruit and veg, but when they got the chance to buy their own lunches, they usually went for chips and gravy.... The main question ... was why people consume things that can only cause them harm. None of the experts we asked had any terribly clear answers'.[11]

Some politicans and medical officials react by moving the goalposts. Government ministers now commonly suggest that media campaigns aren't aiming to change behaviour but only attitude. And health promoters themselves are adopting more modest aims after researchers finally succeeded in convincing them of the differences between commercial advertising and health campaigns. Those selling 'new, improved' catfood, argue the researchers,[12] rarely have as their primary aim the conversion of behaviour: most ads mobilise and channel existing predispositions, and offer immediate gratification rather than future benefits. And while to the advertiser success can mean gaining a 1% increase in the market, health educators consider a 1% change in behaviour derisory.

Media research also shifted its view of the audience, now no longer passive imbibers of the media message, but also active producers of

meaning. The designers of campaigns began to realise that children didn't sit there passively imbibing television messages, eating TV as they were supposed to eat their greens: they pick and choose with both. Attention was focused on social networks and communities; health promoters began to acknowledge the importance of supplementing media campaigns with off-screen back-up and information, and cited approvingly the only two media health education campaigns which could confidently be called successful - North Karelia and Stanford, even though the former at least was shaped by additional, unique circumstances.

When their campaigns still didn't meet with striking success, they tackled it largely as a marketing problem: the audience wasn't properly targeted, segmented, pre-tested, or motivated, they suggested, or was given too much information. The message was too long or too short, too dull or infrequent, too impersonal or vague or unpopular. Fashions changed. Shock tactics and fear-arousing messages, previously shunned, came back into favour. Health education campaigns started suggesting that health was fun, fun, fun - even rock stars were doing it.

What all this ignored were the many other dimensions, beyond individual consumer choice, which influence food preference and habits. Very few health education campaigns drew attention to the production of food and the well-documented role of multinational food manufacturers in shaping diet. The benefits to food companies in adding value to food by refining it, the usefulness of sugar as a cheap bulking agent, the literally gristly contents of the modern sausage, the effects of first world food production on Third World economies - these are confined to the late-night Channel 4 documentary, not headlined to media health campaigns targetted at individuals.

Also missing from most of the mass media campaigns was any real acknowledgement of the role played by big food chains and supermarkets in shaping our diet, from their placing of sweets at child height by the check-out queue, their purchase of South African foods, and their frequently economical-with-the-truth labelling, sometimes sneakily burying sugar under the nowadays benign heading of carbohydrates. Healthy eating campaigns generally avoided mention of the Government, too: while broadcasters and campaigners preached the message of healthy eating, additives in British food were increasing by 5% a year.[13] The British Government not only did nothing to stop them but also desisted from introducing mandatory food labelling, and did nothing to back up the NACNE report.

Ironically, it was a minister in Margaret Thatcher's Government who finally put the politics of food onto the media agenda. When, in late 1988, Edwina Currie declared on ITN News that most of the country's eggs were infected with salmonella, she helped create a full-scale moral panic. The subsequent reporting of listeria in soft cheese

(an old story to food researchers, but a new story to television) and the dangers of cook-chill meals propelled the issue of food safety into the news headlines again, and the phrase 'the politics of food' - once the preserve of radicals - now became acceptable even in newspeak. The furore over salmonella and listeria, however, didn't mark a paradigm shift: to some extent it was simply a reminder of the power of politicians to set the media agenda. Although it also formed part of the growing politicisation of the concept of 'safety' and, along with issues of water purity and privatisation, and transport safety (post Zeebrugge, King's Cross and Clapham), reflected increasing public disquiet over the social costs of an unregulated market.

Yet if politics elbowed its way into the news reporting of food, it was kept obstinately away from healthy eating campaigns. If you were a child targeted for a mass media food campaign, you'd almost certainly not be exposed to anything on diet and income, even though diet-related health problems are most common in poor people: 80% of low-income people in one survey missed meals for lack of money,[14] and the National Council for One-Parent Families has shown that the recommended diet for a pregnant woman couldn't possibly be followed by a woman on supplementary benefit.[15] Hardly surprising that these aspects of diet are glossed over in official campaigns, under the aegis of a government which has reduced some benefits and pensions and frozen child benefit, so making healthy eating for the most vulnerable groups even more unattainable.

The injunctions to look-after-yourself and switch diet also ignore the cultural dimension of food: they rarely acknowledge the fact that diet is culturally-determined, developing over time, differing between ethnic groups and sub-cultures, and including strong beliefs on what's considered a proper meal which can conflict with current medical thinking.[16] They may also be larded with ideology: the campaign to persuade British Asians to eat a 'healthier' diet to avoid rickets was accompanied by Government refusal to fortify chapati flour with Vitamin D (though they had fortified margarine in the post-war years), reinforcing a notion of Asian culture as faulty.

Above all, healthy eating campaigns rarely broach the subject of food and gender, except to maintain existing social relations within the family, and to attribute the responsibility for the health of men and the family wholly to women. They don't discuss the tremendous and unequal burdens most women shoulder in planning, buying, and preparing food, except to make quite unrealistic appeals to already stretched women to 'shop around'. They also assume that women shape the family diet, even though women again and again report that men's taste is not only resilient but also crucial in determining their shopping habits; that men frequently reject healthy food like brown bread; and that, since they are unable to prepare two sets of meals, they must bow to male preferences. Healthy eating campaigns

directed at women never pause to consider that encouraging women to feel responsible for their family's diet may help them feel stressed and guilty and iller than any chip or chocolate eclair could do. Such campaigns also generally ignore many women's disordered relationship with food, manifested in conditions like bulimia and anorexia, and never ask why food should so frequently be a channel for women's emotional problems. Nor do they report on the preponderance of women in the low-paid catering industries, or on their dire working conditions which contribute to ill-health.

Above all, healthy eating campaigns singularly fail to engage with the *meaning* of food - as social ritual, as primary nurturing experience, as comforter, as rebellion, as purge, as symbol for badness or goodness, in countless social and psychological ways. What an opportunity here is missed - in the sociology of the sweet alone (as chosen, as sucked, as secreted after sucking, or in the meaning of its shape and colour) is inscribed the social relations of children and adults, as well as the social production of food.

Finally, healthy eating campaigns gloss conveniently over the lack of consensus on food - the conflicting evidence as to the risk factors of coronorary heart disease, or the recommended reductions in fat and sugar. Yet according to one recent study on the production of health education material,[17] overemphasisng expert unanimity about what constitutes a healthy diet doesn't delude the general public, which is interested in knowing *how* risk factors or recommended reductions are arrived at. And in proposing solutions, healthy eating campaigns rarely move beyond the notion of individual choice to suggest *collective* action to alter the food policies of governments, companies, or supermarkets.

I want to suggest that instead of ignoring these dimensions of food and eating, the media and health education campaigns should actually be taking them as their chief topic. The production of food, income and class, food and culture, food and development, food and ecology and the environment, food and gender, the meaning of food, the controversies over food - precisely these should be the stuff of educational and media material about food.

This isn't to suggest that, bearing such new improved messages, the mass media would finally succeed in influencing tiny minds and righting social wrongs. Despite entrenched popular belief, the media are not so powerful, nor does social change arise merely from individual consumer choice. The structural, material, and broader cultural influences on our lives are much more significant in shaping diet than any number of broadcast messages. But I do suggest that by focussing on these crucial neglected areas the media, together with educational materials, could play a role in challenging the official agenda on food: a series on food and history might encourage children to question grandparents and relatives on their diet when young, to

swap materials with children of other cultures on their diets, and trace the origins of the modern snack. The school dinner itself, whether the old stodge, the new improved version, or the chips-with-everything canteen, can be a potent resource for both school and media discussion.

There are many fascinating projects about food currently in schools, initiated by enthusiastic teachers, and carried out by enthusiastic children, but they're rarely reflected in or initiated by the mainstream media. Indeed, if the chief influence of the media is by setting agendas rather than changing personal opinion what are we to make of the strikingly different agendas of educational and mainstream broadcasting? The range of ideas addressed by educational broadcasting is far broader than by peak-time television. Coverage of the Third World, as is well-documented, tends to dwell on 'natural' disasters and malnutrition, coups and dictators. Yet in an excellent Channel 4 daytime educational programme like 'The Politics of Food'[18], young people get an exemplary introduction to the structural causes of malnutrition and sickness in Third World countries.

The film, its starting-point Brazilian cane-cutters too poor to afford nutritious food and hence stricken by high infant mortality, examined the gap between rich and poor in Brazil, exacerbated by Brazil's project of modernisation. It traced the effects of investment by multinational corporations (the benefits reaching only the already affluent), the domination of agriculture by commodities for export, the cutting of food subsidies to pay the vast international debt, and the growing loss of patience among the under-nourished poor. The programme thus provided a case-study on the contribution of the First World to Third World food problems. Yet such a perspective is rarely routinely adopted in press, TV, and radio coverage of famine and Third World poverty, and young people are unlikely to find the explanations they discover in this programme endorsed and amplified in the mainstream media.

Neither schools nor media, of course, operate in a vacuum: both are shaped by social realities and, increasingly, financial imperatives. Material from commercial companies and food manufacturers is regularly finding its way into schools and colleges; commercial and political considerations play a key role in shaping broadcasts and in helping to determine what are seen as legitimate ideas. Some of the ideas about food discussed here are ones to which most maintstream broadcasters and journalists are simply never exposed, or are stigmatised as 'political'. It's a vicious circle: journalism is dependent on experts, but only certain expertise is recognised, which in turn limits the ideas in media circulation. How far either schools or the mass media can go in the present political climate in challenging government and medical orthodoxies remains questionable. Indeed, with the imminent deregulation of British television, even those few

existing protected peak-time documentary slots which do address broader social, political, and economic issues are likely to be phased out in the push for maximum audiences and profit. Easier by far to re-run 'Miami Vice'.

But if they wish to avoid repeating the post-failure post-mortem, mass media campaigns will have to abandon prescriptive attitudes and start listening instead to their intended audience. This has been called the community development approach to health; it examines health issues from a lay perspective, and validates the health needs which local people themselves have identified as important, instead of imposing professional definitions. In the words of an American community health organiser, 'It is impossible to *produce* health among the powerless. It is only possible to allow health by transferring tools, authority, budgets and income to those with the malady of powerlessness'.[19]

This isn't merely a matter of tone - of adopting the demotic, or recruiting pop singers to sell health - or a marketing challenge to devise the right message. It may mean in the short term abandoning the issues on the professional agenda altogether. When the BBC asked a group of 1000 people to rank from a given list the most serious health risks in order of importance, nuclear waste and pollution emerged as second and third (after smoking). Dietary factors like too much fat and too much sugar came much lower down the scale ' after stress.[20]

References

1. I use the phrase 'orthodox health educators' to distinguish the traditionalists from the small but growing band of health educators whose beliefs and practice are grounded in the quite different community development approach discussed at the end of this paper.

2. Gussow, J. (1973) '"It Makes Even Milk a Dessert": A report on the Counter-nutritional Mesages of Children's Television Advertising' *Clinical Pediatrics* **12 2**.

3. Atkin, C. (1975) 'Effects of Television Advertising on Children: Survey of Praedolescent's Response to Television Commercials' Report no. 6, East Lansing, Michigan State University.

4. Lewis, C. and Lewis, M.A. (1974) 'The Impact of television commercials on health-related beliefs and behaviours of children' *Pediatrics* **53** (431).

5. Kanter, D. (1970) 'Pharmaceutical Advertising and Youth' Coronado Unified School District, California, USA. Refs 2-4 drawn from Sheiman, D. (1980) 'Effects of Televised Drug Commercials on Children' *Pediatrics* **65** (3).

6. Phillips, D. P. (1986) 'Clustering of teenage suicides after television news stories about suicide' *The New England Journal of Medicine* **315**, no. 11, September 11, though British research - e.g. Platt, S. (1987) *BMJ*, April 11, **294** - contradicts the suicide hypothesis.

7. Irwin, C. E. et al (1982) 'Predictors of Tampon Use in Adolescents After Media Coverate of Toxic Shock Syndrome' *Annals of Internal medicine* **96** (2), pp 966-968.

8. Lambo, A. M. (1981) 'Children's Ability to Evaluate Television Commercial Messages for Sugared Products' *American Journal of Public Health* **71** (9).

9. Rossiter, J. R. and Robertson, T. S. (1980) 'Children's Dispositions Toward Proprietary Drugs and the Role of Television Drug Advertising' *Public Opinion Quarterly.*

10. Balfour Jeffrey, D. et al (1982) 'The Development of Children's Eating Habits: The Role of Television Commercials' *Health Education Quarterly* **9** (2 and 3).

11. The Well Being production team (1982) *Well Being* (Penguin Books, London. pp 13-14.

12. McCron, R. and Budd, J. (1979) 'Mass communication and health education' in Sutherland (ed) *Health Education: Perspectives and Choices* Allen and Unwin.

13. Gardner, C. (1986) 'Out of the frying-pan' *New Society*, January 17.

14. Child Poverty Action Group survey, quoted in Cole-Hamilton, I. and Lang, T. *Tightening Belts: a report on the impact of poverty on food* London Food Commission.

15. Rakusen, R. and Davidson, N. *Out of our hands* Pan, London.

16. Charles, N. and Kerr, M. (1986) 'Eating Properly, The Family, and State Benefit' *Sociology* **20** (3), and see Anne Murcott's work on the sociology and anthropology of food.

17. Farrant, W. and Russell, J. (1986) 'The politics of health information' *Bedford Way papers 28*, University of London, Institute of Education.

18. Broadcast March 22 1989.

19. McKnight, J. (1985) 'Power, not poverty, for a healthy public' *Radical Community Medicine* **22**, p 37)

20. Day, K. 'Attitudes towards health and health education' (BBC Broadcasting Research, 1987).

Chapter 5

ADVERTISING AND YOUNG PEOPLE

Gerard Hastings

The influence of the media on young people has been an issue of concern to communication researchers for many years. This concern has been stimulated by bodies like the Federal Trade Commission (1979), the National Institute of Mental Health (Pearl et al, 1982), the World Health Organisation (Leathar, 1985) and the Health Education Council (Young, 1985), all of whom have commissioned reviews of research in this area. It is now generally accepted that the media does have an influence although casual relationships are difficult to establish. This influence has been shown to be both desirable and undesirable. For example, studies of Sesame Street (Bogate and Ball, 1971) indicate that it makes viewers more tolerant of other races. On the other hand regular viewers of excessively violent programmes tend to view the world as a harsher more aggressive place (Hawkins and Pugsee, 1981). It is also clear from research in this area that important intermediaries such as parents and peers can influence the effects of the media enhancing the benefits of 'good' programmes (McLeod et al, 1982) and reducing the harm done by 'bad' ones (Gross and Morgan, 1984).

Advertising represents an important and partial subset of the media and it would therefore seem reasonable to assume that this will also have an influence on children. The research supports this assumption. It has been shown to have indirect effects in decreasing sociability and encouraging materialism (Goldberg and Gorn, 1978). Some would also argue that it has beneficial effects in terms of consumer socialization (Banks, 1979).

Advertising has also been shown to have more direct effects in, for example, stimulating children's interest in specific products (Goldberg and Gorn, 1974). However, these effects have been demonstrated to be mediated by parents (Popper, 1979) and by adolescence young people manifest a market cynicism about the persuasiveness of advertising (Aitken et al, 1985) - although this latter phenomenon does not, of course, make advertising innocuous.

Given that advertising does have at least some influence on young people, there are three possible responses. Firstly, you can seek to *control advertising* thereby restricting young people's exposure to it. In this country such restrictions are governed largely by voluntary agreements (Burleton, 1982). Broadcast advertising is controlled by the Independent Broadcasting Authority (IBA) which has drawn up an IBA Code of Advertising Standards and Practice. It vets all radio and television commercials twice - as scripts and as finished productions. It also accepts complaints from the public and industry. A separate British Code of Advertising Practice controls display advertising.

It is drawn up by the advertising industry itself but is administered by a semi-independent body - the Advertising Standards Authority. It operates by pre-vetting a limited number of advertisements and more extensively through a complaints procedure.

The codes cover both advertising in general and, more rigorously, certain product types. For example, all display advertising is constrained to be 'legal, truthful, honest and decent', whilst cigarette advertising is banned completely from television and, among other restrictions, is not permitted to suggest that smoking will enhance social status or sexual prowess. The extent to which these regulations are obeyed is of course debatable (Fynn, 1981).

Secondly, there is the possibility of engaging in *counter-advertising*. This is typically product specific - eg anti-alcohol or anti-tobacco advertising. Perhaps the best known examples of these in the UK come from the Scottish Health Education Group, who are the Government body responsible for health education in Scotland, and the Health Education Authority, who are the equivalent organisation for the rest of Britain.

A final response to the influence of advertising on adolescents is to provide them with the *skills* to use advertising more effectively by, for example, putting these issues on the school curriculum. This will have direct benefits for the pupils themselves and, more indirectly, will enhance their ability to act as mediators on behalf of their own children. The proven importance of intermediaries noted above supports this strategy.

However to operate effectively all of these responses must be based on a clear understanding of how advertising works. Three issues should be considered here:

- the power of advertising,
- the way in which it is used, and
- the objectives it fulfils.

The Power of Advertising

Early models in communication theory characterised the process as

a one way phenomenon, involving an active message sender and a completely passive recipient. Analogies are often drawn between this model and a hypodermic syringe: just as the doctor injects the drug into the patient so the communicator injects the message into the audience. In both cases the effects are both predictable and recordable.

This analysis presents the communicator as powerful and directly manipulative, with dramatic effects being relatively easy to achieve. The media, particularly television and radio, as channels of mass communication come to be seen as a means of controlling the population. These ideas were given added credibility when commentators like Vance Packard (1963) applied them to commercial advertising, the influence of which became greatly exaggerated and over-simplified.

The limitations on the manipulative power of advertising can be illustrated by an example. It is estimated (Foxall, 1980) that three quarters of all new product launches on the food market fail and that this failure rate increases to 90% in other product fields. If advertising were as powerful as Packard suggests this could never be.

This 'manipulative' model came to be questioned when researchers found the effects of communication to be much more elusive than predicted. Gradually more complex explanations were developed. These included the two, or more, step model initially proposed by Katz and Lazarsfeld (1955), involving opinion leaders in the process of communication; the use and gratification approaches (McQuail et al, 1972 and Rosengren and Windahl, 1972) which depict the consumer deliberately using the media rather than vice versa and, most recently, cultural effects models which place the media in a cultural context and see its effects as indirect and long-term (Tudor, 1979). Many of the studies discussed in the introduction to this chapter fall into this latter category.

Interestingly, thinking in communication theory matches that in advertising. Early models of advertising conceptualised the process as a hierarchy of effects on consumers - typically cognitive (eg product awareness), affective (eg product liking) and then conative (eg product purchase). However recent models have attributed a more active role to the consumer. Thus Joyce (1975) suggests that consumers bring preconceptions to the advertisement, use it to decrease dissonance and that attention and perception are selective. Similarly Baker (1979) emphasises the importance of 'enabling conditions' - consumer needs and resources - at the outset of the advertising process. This contrasts with the hierarchical models which present attention/awareness as the starting point. Finally information processing theory (Sternthal and Craig, 1982) sees consumer decision making in the context of their *use* of information, including that obtained from advertising. Taking this trend to its

logical end, there is now a vigorous school of thought that sees the consumer using advertising as much as vice versa (Lannon and Cooper, 1983).

None of these alternative theories of communication or advertising are universally accepted but they do all share the idea that the audience as well as the sender has an active role to play in effective communication. Communication can no longer be seen as the straightforward transmission of objectively defined information by an active sender to a passive recipient. It is a two way rather than a one way process, an exchange rather than an imposition.

Despite the demise of the manipulative model in communication theory, it is still alive and kicking among many practitioners. For example, recent Government sponsored nutrition, drugs and AIDS advertising which adopt fear arousing approaches can be seen to owe much to this view of communication.

The Use of Advertising

To understand how advertising is used in commerce it is necessary to examine the whole business process. Business, or to give it its more modern name, marketing, is concerned with 'the satisfaction of consumer needs at a profit'. This means that instead of producing products and *then* selling them, the marketing oriented business man or woman first of all takes the trouble to find out what the customer wants, *then* produces this. The recent history of the British motor cycle industry demonstrates the importance of this distinction.

In the late 1960s the industry, dominated by apparent immortals such as BSA, Triumph and Norton, concentrated on supplying powerful specialist machines to committed motorbike enthusiasts. These bikes were big, dirty and dependent upon a mechanically minded and experienced driver. By contrast the Japanese acknowledged the complexity of the industry. For example they recognised the existence of a range of markets including a large teenage market for small (up to 250 cc) clean and reliable bikes that would act as both an effective means of transport and a fashion accessory. The result was the decimation of the British motor cycle industry (Sanders, 1978).

In achieving his goal of satisfying consumer needs the marketer can manipulate four main variables: the product itself, the price charged for it, where it is sold and how it is promoted. These variables are not discrete alternatives but are used in conjunction with each other. For example McEwan's Lager, in targetting young people, will produce advertising that appeals to this age group, but they will also ensure that the product, packaging, price and distribution are equally appropriate.

The job of the marketer is to select the 'best' combination of these variables - the best 'mix' - to meet his goal of satisfying consumer needs.

Two points are worth noting about the mix. First the ultimate arbiter of the best combination is the consumer. It is this principle that underpins the need for market research. Second, advertising is only a part of the mix and not necessarily a major one. Certainly it will not be used in isolation. Advertising alone cannot sell a product that is badly priced, distributed or designed.

The Objectives of Advertising

As noted above many models have been put forward to explain how advertising works. Little consensus has resulted and no one explanation has been accepted. However, most writers agree that advertising can perform a number of objectives. These include awareness generation, factual and emotional communication and persuasion. To take an example, advertising for an insurance company may seek to tell people that the company or its products exist, explain the nature of these products, emphasise the security and peace of mind they bring, or to directly sell a particular policy.

A number of points can be made about this range of objectives. First it demonstrates that advertising is not simply concerned with persuading people to buy things. Only a very small proportion of adverts are intended to do this, at least in the short term; most are concerned with communication objectives. Second, the importance of emotional messages should be noted.

Third, and most importantly, in deciding what type of objectives to set a campaign, consumer perceptions are critical. For example, if a company is launching a new product or brand of which no one has heard, then awareness generation is likely to be important. If people have heard of the product but are unfamiliar with some aspect of usage then factual communication matters and so on. Furthermore, consumer perceptions not only determine the objectives of the advertising, but also its content, style and design. In a clear recognition of the nature of communication most advertisers now accept (Berry, 1979) that it is the message as received - not as sent - that matters. When using the media this means that audience research must be used to evaluate effectiveness and more importantly to help *develop* appropriate material.

The 'advertising research process', described in detail by Potter and Lovell (1975) facilitates this. It is a standard sequence of interrelated research projects with target audiences which begins with basic 'problem definition' research exploring target audience perceptions of a particular issue or problem, and determines what role, if any, the mass media can play in approaching this subject.

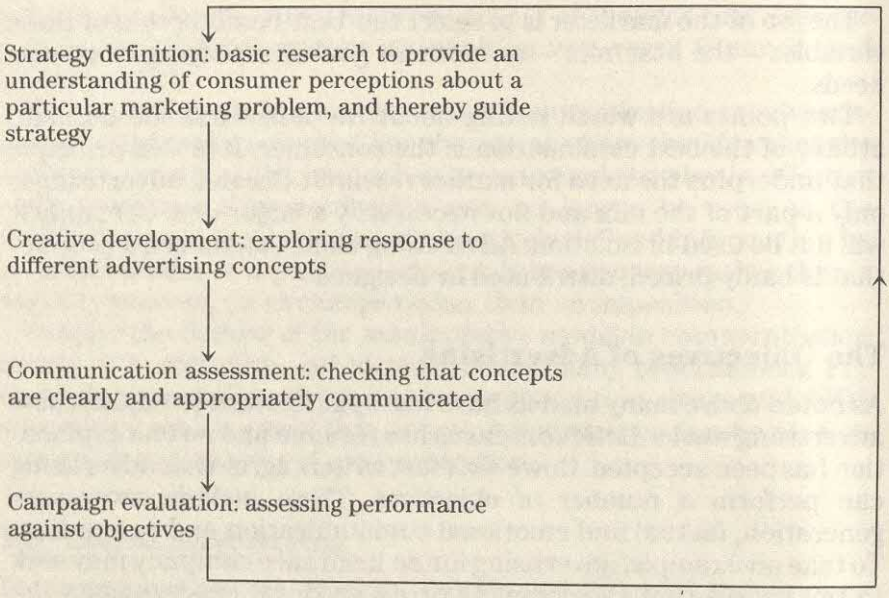


Figure 1 *The advertising research process*

If the mass media is seen to have some function to perform, then possible campaign ideas are developed. The next research stage is to assess response to these ideas and see which has the most appeal. This is sometimes referred to as creative development research.

The strongest idea is then converted into finished or semi-finished material which is again researched, firstly to check that it genuinely expresses the intended concept and secondly, to ensure that the detailed execution is appropriate. The material should now be perfected and the campaign will run.

A final stage of research, evaluating the campaign, will take place after it is complete. The whole research process is illustrated in Figure 1.

There are, of course, those in the advertising world who question the value of research. Typically, they argue that it damages the creative process (Vaughn, 1982). Undoubtedly, bad research that merely criticises and constrains, will do this. However, good research helps rather than hinders the creative (Hastings and Leathar, 1987), and performs an essential role in channelling efforts. In the words of David Ogilvie (1983), advertisers who do not use research '... are as dangerous as generals who ignore decodes of enemy signals.'

Discussion

A number of points emerge from this analysis of advertising. First, it

is apparent that there is a danger of *exaggerating* the power of advertising. It does *not* directly manipulate behaviour or force people to do things they have no wish to do. Advertisers who attempt to use it in this way are treading the same path as the British motor cycle industry.

Overstating the power of advertising will undermine attempts to control it because claims cannot be proved and are therefore easily refuted by the industry. It can also damage attempts at counter advertising by leading people to set such campaigns unrealistic objectives. Anti-smoking advertising, for example, will not by itself stop people smoking.

Exaggerating the effects of advertising can also be counter-productive when teaching people how to respond to it. Most adults will deny that advertising influences them. To do otherwise is to admit to being gullible and weak-willed. People feel that they are making their own minds up about behaviours such as product purchase. Furthermore, in one important sense they are right. The best advertising is that which recognises and builds on people's current needs, rather than conflicting with and trying to change them.

A second danger is that of *over-simplifying* the objectives of advertising. It is not just concerned with persuasion and product purchase on the one hand or straight factual information on the other. The full range of advertising objectives should be recognised - especially those to do with emotional and image based messages.

Imagery is particularly important when considering advertising control. Although more difficult to measure, claims made at an emotional level should be monitored just as closely as rational appeals. This type of advertising should also be analysed in any teaching on this subject.

Emotional messages can also be of value in counter-advertising. Because they are intangible and irrational there is a tendency to see them as almost unreal and perhaps unethical. Packard (1963) in particular is inclined to do this. However, many of our actions are influenced by emotion as well as by logic and the desirability of advertising that operates on this level depends on the emotion involved. For example, branding that provides reassurance about the quality of replacement brake shoes for your car is providing a real and valuable benefit. Alternatively, advertising which suggests that drinking alcohol is trendy and macho is much more questionable. In short, the acceptability of emotional appeals, as with factual ones, depends on the content of the message.

A third point that emerges from our analysis of advertising is that we should consider the *context of advertising* as it is used in business. It is part of a package of variables and if we are concerned about the effects of one, we should be concerned about all of them.

A fourth and final point to arise concerns the idea of consumer or *audience orientation*. Most commercial advertisers have accepted that effective communication is born out of the ability to listen rather than the ability to shout. Consequently they have developed systems that enable them to listen more effectively. These systems can also be usefully applied to media based communications produced in response to advertising, including counteradvertising and educational support material (Hastings and Scott, 1988).

The Advertising Research Unit (ARU) at the University of Strathclyde, in Scotland, has been doing this for a number of years (ARU, 1988). It has, for example, used research to help the Scottish Health Education Group (SHEG), the Government body responsible for health education in Scotland, strengthen their media campaigns. In the area of anti-smoking, major changes have resulted (Hastings and Leathar, 1986). Traditional, negative approaches using fear to emphasise the drawbacks of smoking have been replaced by positive appeals offering alternatives to cigarettes and promoting the benefits of being a non-smoker. Threats and restrictions have been superseded by promises and opportunities. These changes would not have happened without the careful monitoring of audience perceptions. They are the outcome of SHEG's acceptance that effective communication involves the exchange of perceptions between two parties rather than one person imposing views on another, however well intentioned.

References

Advertising Research Unit, Department of Marketing, University of Strathclyde. Publications List.

Aitken, P.P., Leathar, D.S. and O'Hagan, F.J. (1985) 'Children's perceptions of advertisements for cigarettes' *Social Science and Medicine* **21** (7).

Baker, M.J. (1979) *Marketing an Introductory Text*. Third Edition, MacMillan Press, London.

Banks, quoted in Robertson, T.S. (1979) 'Parental mediation of television advertising effects' *Journal of Communication* **29**.

Berry, N. (1979) 'The creative demands of research' *Admap*, February.

Bogate, G.A. and Ball, S. (1971) *The Second Year of Sesame Street: A Continuing Evaluation*. N.J. Educational Testing Service, Princetown.

Burleton, E. (1982) 'The self regulation of advertising in Europe' *Journal of Advertising* **1** (4).

Federal Trade Commission Staff (1979) *Consumer Information Remedies*. US Government Printing Office, Washington DC.

Foxall, G. (1980) *Consumer Behaviour: A Practical Guide*. Helm, London.

Fynn, A.E. (1981) 'Cigarette advertising and health education: use and abuse of the media' in Leathar, D.S., Hastings, G.B. and Davies, J.K. *Proceedings of the Health Education and the Media Conference*, Edinburgh.

Goldberg, M.E. and Gorn, G.J. (1978) 'Some unintended consequences of TV advertising to children' *Journal of Consumer Research* **5**.

Goldberg, M.E. and Gorn, G.J. (1974) 'Children's reactions to television advertising: An experimental approach' *Journal of Consumer Research* **1**.

Gross, L. and Morgan, M. (1984) 'Television and eculteration' in Dominick, J. and Fletcher, J. (eds) *Broadcasting Research Methods*. Allyn and Bacon, Boston.

Hastings, G.B. and Leathar, D.S. (1986) 'Anti-smoking publicity in Scotland: a decade of progress' *New York State Journal of Medicine* **86** (9), pp 480–484.

Hastings, G.B. and Leathar, D.S. (1987) 'The creative potential of research' *International Journal of Advertising* **6**, pp 159–168.

Hastings, G.B. and Scott, A.L. (1988) 'Advertising research: a new perspective in developing educational material' *Research in Education*.

Hawkins, R.P. and Pugsee, S. (1982) 'Television's influence on social reality' in Pearl et al, op. cit. Vol. 1.

Joyce, T. (1975) 'What do we know about how advertising works' in Barnes, M. *The Three Faces of Advertising*. Advertising Association, London.

Katz, E. and Lazarsfeld, P. (1955) *Personal Influence*. The Free Press, New York.

Lannon, J. and Cooper, P. (1983) 'Humanistic advertising: a holistic cultural perspective' *International Journal of Advertising* **2** (3).

Leathar, D.S. (1984) *The Influence of Television on the Mental Health of Adults and Children: A Review of Some Critical Issues*. Prepared for Division of Mental Health, World Health Organisation, Geneva.

McLeod, J.M., Fitzpatrick, M.A., Glynn, C.J. and Falts, S.F. (1982) 'Television and social relations: family influences and consequences for interpersonal behaviour' in Pearl et. al., op. cit. Vol. 2.

McQuail, D., Blumer, J.G. and Brown, J.R., (1972) 'The television audience, a revised perspective' in McQuail, D. (ed), *Sociology of Mass Communications*, Penguin, Harmondsworth.

Ogilvy, D. (1983) *Ogilvy on Advertising*. Multimedia Publications, London.

Packard, V. (1963) *The Hidden Persuaders*. Penguin.

Pearl, D., Bouthlet, C. and Lazar, J. (eds) (1982) *Television and Behavour: Ten Years of Scientific Progress and Implications for the Eighties*, (Vols. 1 and 2), US Government Printing Office, Washington DC.

Popper, E.T. (1979) 'Mother's mediation of children's purchases requests' *Proceedings of the American Marketing Association's Education Conference*.

Potter, J. and Lovell, M. (1975) *Assessing the Effectiveness of Advertising*. Business Bodies, London.

Rosengren, K.E. and Windahl, S. (1972) *Mass Media Consumption as a Functional Alternative*.

Sanders, S. (1978) *Honda: The Man and His Machine.* C.E. Tuttle Company, Tokyo.

Sternthal, B. and Craig, G.S. (1982) *Consumer Behaviour: An Information Processing Perspective.* Prentice-Hall.

Tudor, A. (1979) *On Alcohol and the mystique of media effects.* In Cook, J. and Lewington, M. (eds), *Images of Alcoholism*, British Film Institute, London.

Vaughn, R.L. (1982) 'Creatives v. researchers, must they be adversaries?' *Journal of Advertising Research* **22** (6), pp 45–48.

Young, B.M. (1985) *The Incidence and Content of Television Advertising of Sugared Products to Children – A British Study.* Health Education Council Report, University of Salford, July.

SECTION TWO

INTRODUCTION TO SECTION TWO

Education, whether in the form of schooling, teacher education, or broadcasting, should be central to the process of raising awareness about environment and development issues. The question is: How precisely should education meet this challenge? The chapters in this section make a start in trying to provide some answers to this question.

Robin Jenkins' chapter on the need for concentropic education is a challenging contribution to the debate about the new kind of education that we will require in our schools. If we are to succeed in living with the problems that we ourselves have created we will need to educate the next generation so that they can reach new understandings and contemplate new forms of action that are beyond our present abilities. Robin Jenkins' chapter accepts this challenge and produces an argument that is both theoretically sophisticated and practically realisable in a concrete way.

He achieves this difficult task by concentrating on the consumption of food and the implications for the way we live. The theoretical argument hinges around the concepts of energy transformation and centropy while the practical realisation of these ideas focuses on eating and excreting. This provides an area of study that can be realised within the normal facilities of the school. The issues raised are also relevant to the new National Curriculum and to the cross-curricular topics of Health Education and the Environment. The practising teacher will find much of interest within the chapter.

The contribution from Stephen Sterling introduces a wider dimension to the debate on the scope and sequence of environmental education by arguing for the concept of 'holism' to be the guiding principle of both the notion and perspective that should inform our understanding and approach.

The need to take account of the thrust towards a coherent world view and to translate this into a philosophy for education commen-

surate with the environmental requirements for the next century demands a radical shift in our perception of the global predicament and the means through which we respond to it. 'Green politics' with its extensive spectrum of ideas, issues and activities, has in recent years helped formulate the agenda that education must address. This is an imperative if we accept the time-span allowed. It is not possible to sustain a mechanistic and reductionist conceptualisation of the earth if it serves only to produce a limited and fragmented world view. Stephen argues that the foundation for a qualitively different and responsible education involves the adoption and adaptation, of the holistic/ecocentric paradigm.

The motivation for the renewal of education systems to encompass the wave of ideas, concerns and practices draws not only upon the current elements of the development/ecological debate but also upon the tradition of liberal education that is radical, creative and imaginative. The convergence of 'adjectival educations', presently occupying the periphery of systems, may be the catalyst that will facilitate and generate the holistic paradigm that is essential for the governance of education if it is to acquire the green hue as a prerequisite to change from replication to evolution. The deficiency of a system of education trailing public consciousness is patently inadequate in the context of social, political and economic systems that variously place at risk the future of the global ecosystem.

The question posed by Tony Hopkin's chapter is whether Development Education constitutes a radical dimension within the overall provision of education. The premise that Development Education emerged out of a reaction to forms of schooling which ideologically assisted the development process is open to question on two accounts; the concept and nature of Development Education *per se*; and the practice of Development Education as effected through a process of teacher education and research.

Development Education is seen as a form of knowledge and understanding received through both the cognitive and affective domains of learning. Its contentious aspect is whether it should serve as a stimulus for action as a consequence of obtaining knowledge and whether the teacher is, in part, an instigator of such action. In the preparation of teachers as 'development educators' the activist role is traditionally seen as less acceptable than that of a purveyor of information and assessor of values.

Much of this chapter is concerned with the experience of promoting Development Education at various levels of the formal sector within Wales. Tony's contribution to this provision is the taught MEd. degree which has been in existence for ten years. The explanation and analysis of the course reveals a combination of theoretical and practical frameworks utilized by the students as teaching programmes and subsequently evaluated before being reconstructed as

a dissertation for final assessment. What is particularly valuable in this continuous process is the repository of knowledge gathered and the continuity of experience achieved. Practising teachers, as students, are able to explore their own learning experiences within the courses but not in isolation from the practice of schooling which is their substantive experience.

Annette Beard's chapter explores aspects of the teacher in action who, within the limitations of the school and classroom, possesses an awareness of events and their meaning beyond the immediacy of the everyday educative performance that the state system of education places upon those mandated to discharge it.

The received curriculum of the student is an amalgam of schooling, formalised through institutions, and information processing, mediated through non-formal structures and systems such as the media, popular culture, peer groups, families and other social frameworks. The formal system is an exercise in control; it lays down a formulation of knowledge to be imparted and assessment to be conducted; it shapes understanding and instils values appropriate to its interpretation of what constitutes the needs and responsibilities of the individual. Whereas the non-formal system is an eclectic, disparate message with value promotion randomly received and uncritically attended to. This creates a tension for the teacher.

Annette's chapter describes an attempt to resolve some aspects of this tension. Her account of an attempt to implement within a Social Studies course a modular programme of development education designed to educate her students in respect of both knowledge and awareness reveals not only the facilities available to teachers and schools, but also the constraints and limitations - the planning and design of the modular programme, access to suitable resources, in-service education of teachers, assessment procedures and requirements.

In chapter ten Paul Gerhardt provides us with a brief commentary on the present 'state of play' in making TV programmes on environment and development issues. He identifies several key problems for the educational potential of such programming: (i) the reticence of programme planners anxious about audience receptiveness; (ii) competition to find airtime (eg current deregulatory developments seem likely to push schools' TV into night-time transmission); (iii) the authoritative tone of television combined with its lack of interaction with the viewer; and (iv) the reluctance of professionals in television to become involved in using the medium to mobilise social policy or social action - seemingly a consequence of a commitment to 'balance'.

Given these problems, Paul describes how *Battle for the Planet* attempted to overcome some of them by aiming to mobilise the audience beyond fund-raising. He concludes that *Battle for the*

Planet showed how participation by the subject and the viewer could become a reality in broadcasting. However, he notes how current Government policy might well negate many of the insights gained through the series.

In 'Teaching and Learning with Media' Maurice Plaskow draws attention to the problem of user access to media technology (specifically radio and television). In particular, he notes how, after 60 years of radio and 30 years of television, many teachers still do not feel comfortable using either media in school. Maurice argues that this has resulted from a combination of cultural prejudice, which sees television primarily as an entertainment medium, and inadequate attention to use of the media in teacher training. Moreover, the technical complexity and expense of broadcast television do not invite participation. The crucial message of this chapter is that the media is a technology with positive opportunities (such as self-directed study) but the user (educator, teacher or student) requires confidence to realise them and to ensure that educational goals rather than a technological imperative determine practice.

Finally, in chapter twelve David Stephens reminds us of how difficult the implementaion of some of the educational ambitions mentioned in this book would be in Third World countries. In section one Greg Philo and Robert Lamb alluded to the resource inequalities in TV broadcasting between programmers in the West and those in the Third World. In his chapter, David examines many of the constraints on schooling in the Third World and provides a framework through which the quality of primary education can be evaluated.

This is an important contribution because as we discuss the potential for education to critically inform about environment and development issues we should be aware that democratic approaches to these issues must necessarily involve people in the Third World. David's examination of primary education in the Third World is helpful in relating proposals for a critical environment and development education in Britain to this enormous problem of global democracy. Moreover, the critical analysis offered of systems of education constrained by underdevelopment in their response to, and management of, dynamic change has a counterpart in the more 'developed' forms of educational provision. The clarification of purpose and priorities, the explication of the language of possibility and the articulation of educational priorities are equally valid instruments for the analysis of educational systems in developed countries whose policies for growth are inimical to environmental well-being.

Chapter 6

THE NEED FOR CONCENTROPIC EDUCATION

Robin Jenkins

The Challenge

Britain is not the most urbanised society in the world - that record goes to Australia. It is however amongst the most urbanised and it does hold the record for being the longest urbanised. Although I have a Welsh surname my family has lived in London at least since 1850 and I would have to go back some five generations to find any contact with the land. I don't suppose that this is any more time divorced from the land than most families.

We are landless; our children our landless; we live in cities whose only relation to the natural world is totally parasitic and we have to solve the problem - how do we teach them about the natural world, the inter-related interests and needs of species, the role of green plants in the creation and maintenance of the environment and their own impact, role and responsibility within this fragile web of interdependence that is now being rapidly destroyed forever?

In a sentence - how can we teach a caring ecology to urban children? We know full well the consequence if we fail.

One of the saddest things about ecology when it does successfully get onto the syllabus and into the classroom is that the more caring the approach, the more it ends up like romantic history. For many children, talking about when there used to be frogs and butterflies (20 years ago) is little different from talking about when there used to be wolves and wild boar (200 years ago), or for that matter, when there used to be dinosaurs. It is not that easy for a child to relate meaningfully to a frog or a butterfly that no longer exists. I guess that it is precisely because of this type of problem that we all end up discussing food because apart from the air that we breathe (but can't see) and the water that we drink (but can't taste except for the chlorine) our only remaining direct ties to the natural world are through the food that we consume. The important word is the last

one, for we relate to our environment *as consumers* and not in any other way.

As a necessary physiological consequence of eating we all produce carbon dioxide, urine and faeces and for most of it is our most positive contribution to the environment yet in our society these products are given no value whatsoever. They are simply a cost against the public sector and even the Adam Smith Institute sees no potential profit from privatisation. So here are our children, in school, eating school dinners, doing a flush and forget with the products of this consumption, living in a consumer bubble that has no relation to production, the environment or any other living species. The consumer bubble is psychologically cosy and it encourages our little consumers to see food as a comforter. When the bubble is pricked there is widespread shock, horror and disgust in the classroom. Tell an urban child that chips come out of the earth, or that milk is expressed from a cow's udder or that tea is composted leaves and watch the reaction. The WWF Global Environmental Education Programme can certainly give teenagers a good *intellectual* understanding of the basic issues but does this then give them any better basis for relating to their environment than a history lesson helps them to relate to Henry VIII? The point is that we need to teach children to *behave* in a certain way towards their environment, not just to think in a certain way or to understand in a certain way. Any smoker who wants to give up will readily understand the difference between intellectual understanding and behavioural change and that there is not necessarily any relationship other than the emotion called guilt between the two. The same applies to teaching ecology; it quickly makes us all feel guilty or even despairing and it leaves us in some sort of emotional purgatory because there is nothing practical that we can do other than try to assuage the guilt by giving donations to Greenpeace, World Wide Fund for Nature or the Soil Association. The problem then is how to teach ecology to kids in a way that is empowering and enabling and results in changes in behaviour

If we are wanting changes in behaviour then we have to concentrate on behaviour and that brings us directly back to educational terms I think most people, Freudians, Jungians and others, would agree, that emotional and behavioural attitudes towards our bodily production of waste products are more or less fixed for life at around the age 2-3 years. There would be no difficulty in redrafting the chapters on potty training in the classic texts by Dr Spock and Dr Jolly, instructing toddlers to distinguish between floaters (high fibre) and sinkers (low fibre), between needing lots of paper (too much fat) and not needing paper at all (just perfect), instructing them also to understand the nutritional value of these bodily products by (for instance) sowing sunflower seeds with and without potty contents to

see which one grows taller. There are endless possibilities on this front.

On the food front it is altogether more complicated. Whilst potty training it would of course be a good idea to experiment with making different colours of urine and different types of faeces by eating and drinking different things so that the links are securely made and in later life the condition of bodily products can be used as a personal indicator of the degree to which their diet is balanced.

When it comes to the teaching of food consumption how do we actually inculcate ecologically sound eating behaviour in children? If we are talking about behaviour then we need a language that can describe that behaviour in ecological rather than sociological, economic or psychological terms. We cannot begin to answer the question until we have settled for the appropriate language, or alternatively, the appropriate set of theoretical constructs. A Marxist would opt for the language of value, of use-value, realisation of value, value-added and of course labour theory of value. Going back a bit, the French physiocrats would have preferred their curiously proto-ecological concept of agricultural value whilst the Mercantilists would have offered their own curious obfuscation of use-value and exchange value. These languages of economics can throw light on the acts of human exchange and the ways in which we turn almost everything into exchangeable commodities but they fall flat the moment they begin to tackle our physical relation with the natural world. Marx, for instance refers constantly to something called 'the free gifts of nature' throughout all three volumes of Capital, which is a very Christian or Judao-Christian concept.

In fact the obvious language completely escapes economists of all persuasions because they are so busy trying to hold true to the Judao-Christian promise that the human race is somehow apart from nature, above its laws as its keeper. Over the past century or so the apparently religious need to keep the human race up on its pedestal above the laws of nature has led economists into some very curious, not to say ingenuous positions when it comes to natural resources. This is because there are only two logical positions that can be adopted in the end. Either economics is a fairy tale with no secure material base or else we accept that the human race has to tumble down with a bump from the pedestal and become part and parcel of the material-ecological world, in which case economics takes on the same status as alchemy. It is interesting to note that Marxists - and notably Marx and Engels - have explicitly tried to protect the fairy tale and have been willing to denounce some of the laws of physics because they rather confounded their economics. In particular, they rejected the Second Law of Thermodynamics (the pessimistic or entropy law). It is equally interesting to note that bourgeois economists have been willing to express public doubts.

Jevons (1906), for instance, questioned the ecological possibility of unlimited economic growth a good six decades before Meadows et al (1972) in *The Limits to Growth.* The only recent theoretical admissions of the limitations of economics of which I am aware are 'The Entropy Law and the Economic Process' by Geogescu-Roegen (1971) and 'La Economia en Evolucion' by Naredo (1987). Unfortunately there is little that we can now add to the argument between Engels and Podolinsky on these matters during the 1870s. It was all said then. The clue is the focus of overt hostility or general worrying by economists - the intrusion of energy from the natural sciences into the social sciences during the latter part of the 19th century. On the whole they were quite successful in holding off the invasion, some even willing to subscribe to various versions of vitalism to stop energy theory from romping through the biological sciences because they knew that they would be next on the list. The defences have held until very recently. We still all like to think that it is a simple matter of personal ideological choice as to whether we are red-greens or blue-greens when in fact there is no ideological choice to be had between red, blue or green.

My contention is very simple:

The language of ecological education has to be thermodynamics.

I will not go into the theoretical consequences of thermodynamics for economics other than to claim that they are fatal. Anyone interested in the debates on this subject is welcome to a copy of a long, unpublished paper on request ('The Production of Value in Agriculture').

Returning to the main question - how do we inculcate ecologically sound eating behaviour in children? The language of thermodynamics can help define what ecologically sound eating behaviour (and urinating and defecating behaviour) really is. Very simplistically, you do it, everyone should do it in the form of the First Law rather than in the form of the Second Law. There is a philosophical if not a moral presumption here - that life is a struggle against entropy for the organism itself, resulting necessarily in entropic consequences for the environment in the case of all animal life (ourselves included) and the exact opposite in the case of plant life which in this sense is I suppose 'morally superior'. In other words, people eat concentrated energy and dissipate it as hot air, sweat and waste products whilst plants accumulate concentrated energy from carbon dioxide and water using solar energy as the engine for photosynthesis.

2. Food, Energy and Thermodynamics

Food is energy in three basic forms - carbohydrates, fats and proteins. Just about everyone knows about calories and children

know exactly what you mean if you tell them that they are too full of beans. But how does this relate to thermodynamics?

The First Law

Energy can be transformed from one type to another but it can never be created or destroyed.

The Second Law

Whenever energy is transformed it is downgraded from a concentrated form to a more dispersed form. No transformation of energy can occur unless energy is downgraded from a concentrated form to a more dispersed form, and no transformation is 100% efficient.

As a species of animal, we live by transforming plants and animals (food) into body heat and operation, muscle power (work), hot air (and sweat), with urea and carbon dioxide as byproducts. Our food is high grade energy but our bodies, in transforming this into muscle power/work, another form of concentrated energy, dissipate 80% of our food energy as low grade heat. We are part of the entropy process - our physiology dictates.

However, as a species capable of organising itself, other species and the inanimate world, it is within our social/economic power to organise our affairs and the affairs of other species (animal or plant) in such a way as to either increase or decrease their potential for dissipating or concentrating energy. It is here that physicists (who never did like the 2nd law because it is inherently anthropocentric in valuing concentrated energy and not valuing dispersed energy - i.e. energy is useful if it is concentrated and it is not useful when it is dispersed) miss the essential difference between plants and animals from the point of view of humans and species timespan. If we take the view that so far as we are concerned, the sun is permanent, then the potential for green plants to concentrate solar energy into fats, carbohydrates and proteins, whilst dissipating 99.9% of the solar energy as low grade heat that we cannot use, is not very interesting because whatever the plants do, the energy is not useful to us as an animal species. In other words, the fact that plants are bound by the 2nd law the same as us is actually of no practical import - so far as we are concerned. We can happily state a further, even more anthropocentric version of the 2nd law which would go as follows -

For practical human-species-specific purposes plants upgrade useless (but pleasant) sunshine into useful concentrated tissues consisting of fats, proteins and carbohydrates (hydrocarbons).

In other words, instead of apologising for the potentially anthropocentric aspect of the 2nd Law - the idea that dispersed energy is a

downgrading of concentrated energy, and the idea of downgrading is itself linked to how useful or useless something is, it is necessary to focus on precisely what energy is useful and can be used by human beings and what energy is useless in the sense that we can not turn it into a use-value.

Life is a struggle against entropy, which eventually wins at the point of death. The fundamental difference between the chemistry of living matter and the chemistry of inanimate matter is that the former requires a constant input of concentrated energy which the organism disperses as low grade energy in order to maintain itself in a stable state whilst the latter is irrevocably changed by any input of energy, into a different chemical with a different form. In order to maintain itself in a steady state a living organism is permanently involved in downgrading and dispersing energy. At its simplest, this process of respiration can be expressed like this:

$$C_6 H_{12} O_6 + \underline{6}\ O_2 = 6\ CO_2 + 6\ H_2 O + \text{low grade dispersed heat} \quad (1)$$

Respiration is a process common to plants and animals. The difference is that green plants make their own food before eating it:

$$\text{sunlight} + 6\ CO_2 + 6\ H_2 O = c_6 H_{12} O_6 + 6\ O_2 \quad (2)$$

This is also an entropic process in that *on average* concentrated sunlight is downgraded to dispersed warmth. However, for every 999 calories of sunlight that are downgraded, 1 calorie is *up*graded into plant tissue. A heat pump or a ram pump works on exactly the same principle. The fact that 999 calories out of 1000 gets downgraded in the process is really neither here nor there because even if the sunshine did not strike the green leaf it would still be downgraded to a form of background heat when it struck a rock or bare earth. The important point for us is that carbon dioxide and water have been turned into something that we can eat. For convenience, let's call this process of concentrating energy *concentropy*, literally the opposite of entropy, it is changing energy into a more concentrated form.

Physiologically we are destined to add to the downgrading of energy, to the entropy process every day that we live. However, in the living world we are not socially bound to the entropy process and we can choose, if we wish, to increase concentropy on this planet.

In fact concentropy is an energetic definition of agriculture, the process whereby we as a species produce ideal conditions for plants to engage in concentropy by photosynthesis. We can make up for our own biology, which is inherently entropic, by organising concentropic processes. In fact we have to if we are to survive. A farmer who eats 3000 Calories of veg in a day can in fact grow anything up to 30,000 Calories of food in that time, giving an entropy/concentropy ratio of 1:10. This might look a bit like the proverbial 'free meal' and in a sense

it is because the accumulated energy has come from the sun, using 130 million Calories of sunlight in the process. One might view agriculture as the penance we must pay for being an entropic species.

Hunting and any other carnivorous activity is in a sense the very opposite to agriculture in that it multiplies and accelerates the entropy process; for instance it takes at least 24,000 Calories of plants to provide 3,000 Calories of bacon if that is what the farmer chooses to eat, giving an entropy/concentropy ratio of only 1:2, not enough if there is a family to feed.

Thus our diet is an important determinant of our entropy/concentropy ratio (ET/CT).

So far, the argument has dealt only with ET/CT ratio regarding biomass and food. The same criteria can be applied to biomass and fuel, firewood and forestry where broadly speaking the same ET/CT ratio applies but the per capita ET quota is so high that firewood supplies are simply inefficient in many parts of the world. With fossil fuels the ratio is effectively zero because all use of fossil fuels is solely an ET process.

This might all look somewhat obstuse if not entirely absurd but this is because it is a different language for describing our relationship to our world. It would in fact be entirely familiar to any hunter-gatherer or peasant because this is precisely how they think about work and evaluate their inputs. They use the language of energy and effort and yield which really has little or nothing to do with the language of economics (See Lee, 1969 or Jenkins, 1979 for detailed descriptions of such energetic systems.) There is nothing new here, merely a systematised approach to age-old practices.

Once energy has been adopted as the gold standard and the laws of thermodynamics as the limiting factors it is both simple and illuminating to take a look at ordinary everyday things in this way. We can begin to teach a caring ecology rather than a despairing one; we can begin to link our internal ecology to the global ecology.

3. Teaching Energy

Energy is one of those few concepts that has both precise theoretical meanings as well as everyday meanings which do not contradict and all make sense together. Besides the scientific definitions of kinetic, motive, static, latent or potential energy there are straightforward sayings like 'full of beans', things called 'power packs' which can be batteries or milk cartons, no end of empty calorie snacks that have so much energy in them that you can 'work, rest and play', the familiar statement of how many calories per bowlful on the side of every packet of breakfast cereal, plus the promise of iron . . . and so on. A few warm-up minutes at the beginning of a lesson for almost any age group will easily elicit a host of bright responses on the energy front.

The same basic ideas can be taught at almost any level or age group.

At primary level there will be various plants and the classroom hamster or gerbil that can offer their services for the explanation of entropy and concentropy, whilst the aquarium or school pond naturally lends itself to experimentation and explanation of energy balance and particularly balance beween entropic and concentropic processes. The idea that fishes and plants and snails can live perfectly happily in a sealed aquarium without putting in any food causes initial consternation followed by a firm belief in green magic. There are of course endless possibilities with Green Magic, ranging from modern equivalents of the famous Priestly experiments from the 18th century to growing plants in the dark with and without small quantities of dissolved glucose. The idea that plants are made out of air (carbon dioxide) and water appears like pure magic. The idea that plants can make sugar out of water and air is even more fantastic. Chunks of sugar cane are quite cheap in the market and otherwise any sweet fruit can be used to make the same point. When it comes to entropy then the hamster or gerbil is required. There is the puzzle of the missing food that can be demonstrated by weighing the gerbil and cage, weighing all the food that is fed to the gerbil and weighing the cage (with nothing taken out) again at the end of the week. Why is the cage not heavier by the weight of the week's food? (Answer, because the carbon dioxide that the gerbil breathes out is that much heavier than the oxygen that it breathes in.) If the class has sufficient interest and attention span the best exercise of the lot is to grow the gerbil's food under controlled conditions and weigh everything on the way. No end of fascinating questions come out of that one, and it leads into a further development - how much space (or land) is required to feed a gerbil ... or a pupil? This is the moment to introduce pupils to the concept of *landeat*, literally the land required to produce all the food that you eat. What is your landeat? How much land are you using? Divide the world's agricultural land by the total world population and we each have 60 square metres of arable and 85 square metres of pasture. The yield per hectare figures from FAO can be used to plan diets, though the first lesson from this exercise would be that we in Britain use much more than our fair share of land. It is a simple matter to pace out our equitable landeat though the business of calculating the way in which landeat varies with diet is very definitely a question for science in secondary school.

This is not the place to provide a complete set of classroom exercises and experiments for all age groups. Suffice to say that much of the material already used at primary level can be revamped or 'energy-extended' to give a very direct behavioural grasp of energy flows and where we fit in as a species.

In all of this, one of the richest and most neglected resources for teaching is the school kitchen and mid-day meal. There are historic reasons for this which are not relevant here, resulting in separate

management of the catering from the rest of the school but ironically, perhaps, the local management of schools clauses in the 1988 Education Act should pull the kitchens into the life of the schools. Eating the mid-day meal is the most tangible contact that a pupil has with the natural world during the whole of the school day. All too often it is a rather synthetic affair with ingredients which bear not clear relation to anything natural whatsoever:

> sugar, modified starch, starch, skimmed milk powder, hydrogenated vegetable oil, whey powder, caseinates, salt, emulsifier E471, colours E102, E110, E127, flavourings. (Ingredients of Custard Mix)

> modified starch, dried glucose syrup, salt, flavour enhancers - monosodium glutamate, sodium 5-ribonucleotide; dextrose, vegetable fat, tomato powder, hydrolised vegetable protein, yeast extract, dried oxtail, onion powder, spices, flavourings, colours: E150, E124, E102; caseinate, acidity regulator E460; emulsifiers E471, E472(b), antioxidant E320.
> (Ingredients of Oxtail Soup)
> (from Cannon, G. *The Politics of Food*, p. 59)

It is, of course, quite unacceptable that such chemical concoctions be fed to anything other than a consenting adult. The fact that something can be placed in the mouth, masticated and swallowed without resulting in immediate death does not mean that it is food. In any case there are important educational and philosophical reasons why the food that children eat should be *understandable* The custard and the oxtail soup above cannot be understood. By the same argument it is more difficult to understand spaghetti than a jacket potato - the latter is at least recognisably the same thing as the root that was harvested from the earth. Apart from being understandable, food should be intrinsically good and healthy and enjoyable. It should also make sense with the seasons and it loses meaning out of season just as much as if it is canned or frozen. Detractors might detect a false rustic if not a complete romantic behind such notions but the fact remains that we have now brought up a generation who do not understand the seasons and suffer the boredom of eating the same variety of food all twelve months of the year, with never the expectation of the first strawberries or the symbolism of the last grapes (in Spain, on New Year's Eve, one grape to be eaten at each chime of the church bells at midnight) or any other acknowledgement of life's cycles. It is neither nutritionally necessary nor ecologically sound to eat apartheid or Pinochet or even social-democrat Australian grapes throughout the spring and early summer of the northern hemisphere. It is downright immoral when one considers the numbers of ill-nourished people living between the tropics of Capricorn and Cancer that those grapes pass over in planes or pass by in boats to get to us.

Ironically, perhaps, the very severe constraints on education authorities make it impossible to spend more than 30p per meal on

food and in most places the sum is nearer 20p. Whatever other negative effects this has, it at least means that fruits and vegetables can only be bought in season when they are at their lowest price. Unfortunately, many school catering organisations have all but cut out fresh ingredients in the erroneous belief that this saves money when in fact the collective planning of a healthier menu would be more cost-effective. The fact that school catering faces compulsory competitive tendering on a timetable set by the Department of the Environment from August 1989 through to August 1992 means that all aspects of policy, food specifications and nutritional needs have to be examined. Whatever the motives for the compulsory competitive tendering legislation, it does provide an opportunity for every education authority to review its practices, state its politics, and make more of the school kitchen than the neglected and forgotten cinderella service that it has been in the past. Only bureaucratic torpor and lack of imagination stand between the classroom and the kitchen. Menu planning should take place in the classroom and integrate with food projects that are underway, and pupils should be shown how the kitchen works, where the raw ingredients come from and how food is prepared and cooked. It really is quite ludicrous that many secondary schools have no contact whatsoever between the school kitchen and the home economics classrooms.

Other resources available to most schools are city farms, real farms, rural study centres and nature reserves, though often a window box outside the classroom, or some flower pots inside, or a little patch of earth on the sunny side of the playground is far more useful, providing the possibility of daily contact and observation over much of the growing season. There are in fact some very real dangers in taking children to a city farm or a real farm unless the trip is specifically designed to teach what is ecologically wrong with them, or the trip is to a well organised organic farming setup. Many London schoolchildren make a trip to the GLC Farm, now run by Hillingdon. Apart from its shirehorses it is the last word in high-tech, automated, chemicalised production of milk, boasting a carousel milking parlour that milks 32 cows simultaneously as they girate on this huge machine, being fed concentrates on the way. The fact that these particular Friesians would starve if put out to grass, the fact that they are a totally unnatural milk factory that requires imported protein from the Third World to function ... none of this is mentioned on the tape that accompanies the milking session. It is plausible theatre but is ecologically unviable, and now that the quotas have been cut back, economically unviable too. Beware false images and rotten processes when planning trips!

There is actually no educational substitute to involving children in sowing, caring and harvesting. A single trip somewhere only provides a snapshot at a single point in the seasonal cycle, affords no understanding of the process of life and can actually be profoundly

confusing. I am sure that most British children going on holiday to Majorca must think that the land is totally barren if they get off the beach and go inland. The fact that the wheat was harvested in June and the fields were a photosynthetic green all winter is not apparent in August.

It is intrinsically easier to engage children in concentropy processes of growing and accumulating energy than in entropy process of decay and death, though children's fascination with the latter should not be under-estimated. From an educational point of view, entropy processes have the advantage that they are usually more rapid than concentropy processes. It is fascinating how quickly damp, warm bread will grow a fine fluorescence of mildew or how quickly milk will 'go off' and if the class is not too squeamish there is much to be gained from allowing some bluebottles to lay their eggs on a piece of meat because this relates the death of one creature to another. The most important entropy processes in nature are more difficult to teach because they reveal little to the naked eye. We cannot see bacteria, only their effects. Perhaps the most useful prop for teaching entropy is a compost heap, preferably several compost heaps. Few education authorities still operate swill contracts for their school kitchens so there is no shortage of compostable material. The only problem is that kitchen waste is so high in nitrogen and low in carbon and needs mixing with waste that is high in carbon and low in nitrogen to make good friable compost without any smells or worse, concentrated liquid ooze. A bale of straw will do the trick, or better still, hay from a bit of school lawn that has been allowed to go wild. Since the point of the exercise is to work out what carbon/nitrogen ratio bacteria like best (answer: about 25:1) it is no bad thing that the available waste is not at this ratio. The best experiment uses three heaps with varying carbon/nitrogen ratios. The high carbon heap will heat up so much that it catches fire and turns everything to ash and the high nitrogen heap will produce very smelly liquid ammonia whilst the balanced heap will get nice and warm and produce an excellent plant food for the next season. Composting also offers opportunities for recycling urine and faeces and regulating the composting process by the addition of urine (nitrogen). Before embarking on such experiments it is essential that there be sufficient understanding amongst parents and local environmental health officers otherwise the whole experience can be very counterproductive.

There are of course many more experiments and projects that can be used to teach concentropy and entropy with various age groups and the examples given are merely to indicate the range of possibilities and whet the appetite. Most of the school day is spent in the classroom so I will turn now to the potential for teaching food thermodynamics within the context of history, geography, physics, chemistry and biology at secondary level. There is nothing compre-

hensive about this - just a number of examples to give an idea of what is possible.

The taught history of the industrial revolution never mentions potatoes yet without the import of this root from the Incas it is doubtful whether an urban working class could ever have been created, let alone fed. The explanation is in terms of food calorie yields per hectare, or landeats. Only by reducing the landeat of the periphery of Europe, from Ireland in the west to Poland in the east, largely by changing their basic diet from bread to potatoes, could the periphery produce sufficient food surplus for the urbanisation and industrialisation of the centre (Britain, France or Germany).

The taught history of slavery never mentions yams, coco-yams and sweet potatoes but the extraction of a sugar surplus from the Caribbean using slave labour would not have been possible any other way. Examination of the landeat of a slave establishes the point.

During the Thirty Years War there was a peasant saying in central Europe: 'No barley, no war'. Horses will happily live on grass and hay but if they are to charge around carrying men in armour they must be fed barley or oats; the landeat of a horse expands more or less exponentially with the amount of work it is expected to do. The war was dependent on each harvest.

The geography of crops and landscapes and the geography of human exploitation are both tied to the worldwide transfer of crops during the height of Europe's imperialist expansion. The language used mentions neither energy nor landeat and the place where much of it was planned looks innocuous enough in the form of Kew Gardens but the diet of millions of peasants and sharecroppers and landless labourers throughout the world was planned by the Kew curators during the 19th century. They were manipulating two sets of energy equations. One was the ratio of labour input to food output per crop and the other was the ratio of food output to land used. The geography of famine can be explained in terms of food energy as a commodity. Thirty three of the thirty eight major famines since World War II have followed the same pattern as the Great Irish Famine where food was exported from the famine region throughout the crisis and there was no absolute shortage. There was no landeat problem but a landownership problem.

Physics has become the science of energy and its transformations and much can be learned from an examination of agricultural inputs and outputs. Peasant farming turns out to be far more efficient than modern agribusiness. In fact all modern farming is an entropic energy sink and only labour intensive peasant farming is concentropic. Even more intereseting is an examination of the energy inputs and outputs of hunter-gatherers such as Kung of the Kalahari or the Aborigines of Arnemland in Northern Australia. They have justly been described as the world's first and possibly last leisure

class, such is amazing ratio between effort inputs and food hunted or gathered outputs.

The chemistry of life was summed up in a phrase by a 19th century German scientist. He said that 'Life is woven out of air by light'. The chemistry of photosynthesis is complicated but nowhere near as complicated as the physics of the energy flows involved. Perhaps because it is usually quicker and easier in a school laboratory, a lot of practical chemistry involves breaking down complex molecules into simple ones rather than making complex molecules out of simple ones. Whilst the entropic process of changing a complex hydrocarbon into water and carbon dioxide is easily accomplished in a single period, the concentropic process of changing water and carbon dioxide into a complex hydrocarbon takes weeks whilst the plant that is the focus of the experiment photosynthesises and grows. Perhaps because of this it is common for chemistry to focus on the apparently 'more macho' process of entropy which often amounts to simply burning something, leaving the 'more feminist?' process of concentropy to a 'girl's subject', namely biology.

Biology is the place for investigating landeats and linking landeats to food chains and the difference between species high up and low down on the chain. Food chains are always entropic if they are carnivorous and only have the potential for being concentropic if they are herbivorous and this in turn casts an interesting perspective on the global effects of eating more meat. There is plenty of reason for calling a Big Mac a 'Jungleburger' and it is of course a 'Jungleburger' resulting in more and more rainforests being turned into very short term ranching but this is only a small part of the overall consequences. Perhaps we should move into the Home Economics rooms for a full investigation of the relation between diet, health and landeat.

Conclusions

As the inhabitants - in this incarnation at least - of animal bodies we are burdened with an entropic physiology that simply breaks down every concentrated energy molecule that is eaten. As social animals with opposable digits and the ability to do work and physically organise things in our environment we have a choice between acting for entropy or acting for concentropy. There have been concentropic civilisations in the past which left behind a richer potential for concentropy than before. The Incan and T'ang Empires were concentropic whilst the Greek and Roman Empires were entropic. Our 20th century industrial civilisation (East and West) is not only the most entropic civilisation to date but actually accelerates its entropy rate more or less continuously to the point where the whole ecosphere is threatened.

It is significant that *all* known concentropic civilisations in the past have been totalitarian and often also despotic. It is equally the case that no democratic society from the Greeks onwards has ever been anything but intensely entropic. The challenge of our time is to find a democratic method of making our affairs concentropic; failure can take two forms of which the worst is the destruction of the ecosphere, homo-no-sapiens included, whilst the other is the imposition of a global political form that might be called *concentropic totalitarianism* and which will certainly be no better than oriental despotism but can guarantee the survival of our species - along with many others.

Democratic concentropy is only possible if we each and every one of us voluntarily internalise concentropy as a value to influence, inform and determine all our behaviour. It is something worth teaching with all our hearts.

References

Canon, G. (1987) *The Politics of Food.* Century, London.

Engels, F. (1962) *The Dialectics of Nature.* Progress Publishers.

Georgescu-Roegen, N. (1971) *The Entropy Law and the Economic Process.* Harvard University Press.

Howard, A. (1972) *The Soil and Health.* Schocken Reprint, NY.

Jenkins, R. (1979) *The Road to Alto.* Pluto Press, London.

Jenkins, R. (1984) *Food for a Great City.* Greater London Council.

Jenkins, R. (1982) 'The Production of Value in Agriculture' unpublished.

Jevons, W.S. (1906) *The Coal Question.* London.

Kelvin, Lord (1987) *On the Fuel Supply and the Air Supply of the Earth.* British Association for Advancement of Science.

King, F.H (1911) *Farmers of Forty Centuries - permanent agriculture in China, Korea and Japan.* US Dept. of Agriculture.

Lee, R. (1969) 'Kung Bushman Subsistence: an input-output analysis' in Vayda. A (ed) *Environment and Cultural Behaviour.* Natural History Press, New York.

Meadows, D. et al (1972) *The Limits to Growth.* London Earth Island.

Naredo, J.M. and Campos, P. (1980) 'La energia en los sistemas agrarios' in *Agricultura y Sociedad* **15**.

Naredo, J.M. and Martinez Alier, J. (1982) 'A Marxist Precursor of Energy Economics: Podolinski' in *Journal of Peasant Studies* **9** (2).

Naredo J.M (1987) *La Economia en Evolucion.* Siglo Veintiuno Editores, Madrid.

Sahlins, M. *Stone Age Economics* Tavistock, London.

Chapter 7

ENVIRONMENT, DEVELOPMENT, EDUCATION - TOWARDS AN HOLISTIC VIEW

Stephen Sterling

> We must look at the world as a total system of interacting parts. There is no such thing as 'an environment' if we mean by this a surrounding system that is independent of what goes on inside it
>
> Kenneth Boulding (1978)

Introduction

I happened to start this essay a few days into March 1989. It had been quite a week. It started with *The Sunday Times* carrying a huge banner headline on its magazine section, 'The world is dying - what are you going to do about it?' It continued with the Prime Minister defending her Government's record on the environment in an interview on the BBC 2 *Nature* programme (covered in a special 'green' issue of the *Radio Times*), an agreement by the European Community to cut CFC production by 100%, a launch by a new environmental group to capture the hearts and minds of the large part of the population that does not yet belong to a green group, a launch by the Labour party of an initiative under the title 'a greener Britain', continuing and extended news coverage of environmental issues by all the media, and finished with an international conference on the ozone layer, all in a few days.

Less than two years ago, when I was despairing of environmental issues ever making a breakthrough into the public arena, a colleague remarked, with a touch of irony, 'don't forget the issues are on our side'. He was right. Indeed, the explosion of public and political concern seems now to be on a scale that only the most optimistic environmentalist would have been prepared to predict even a few months ago.

Sceptics of a green or non-green variety may see this emphasis as 'flavour of the month', but there are enough signs - both of general concern and looming issues - to suggest that it may be the dominant

flavour of the rest of this century and beyond. In March 1988, Prince Charles spoke of a 'major change in attitude taking place – a growing realisation that we are not separate from nature' and referred to environmental trends as providing 'mounting evidence of a gigantic problem that won't go away'. It seems that Britain, and perhaps the world as a whole, is entering a second period of environmental consciousness following the first wave in the early seventies. This time though it will need to be more profound, as the stakes are much higher. And if it is profound, it will necessarily involve challenges to some centrally held assumptions and ways of doing things both in our own society, and across the world, as some of the issues can now only be tackled through action on a global basis.

Where does this leave educational practice? If the global crisis is as severe as many authoritative voices suggest (Brown, 1988), large parts of current thinking and practice are left looking at best, somewhat irrelevant. The Brundtland report *Our Common Future* (WCED, 1987) called for 'a vast campaign of education, debate, and public participation', to achieve 'changes in attitudes, in social values and in aspirations'. It is becoming clear that this campaign, whilst entirely unorchestrated, may be beginning in the realm of 'public education; through the media – although one might question whether rising awareness of environmental issues is necessarily accompanied by rising understanding. The formal education sector meanwhile is being forced down a road which, while affording some opportunities for progressive practice, is nevertheless directed by a vision which is inappropriate for a literally endangered world. Herein lies a serious mismatch which must be addressed.

To counter this problem, all those who believe in education as a means of improving society in a broad sense, that is, contributing to a fairer, safer, ecologically sound and sustainable world, need to realise and focus on their commodity and mutuality. At a deeper level still, they need to understand the fundamental dynamics of what is occurring in society as a whole as regards the 'green debate'. It is the purpose of this chapter to contribute to these aims, by interpreting what is 'going on', because this has the deepest significance for education. As Lacey (1987) has noted, we need a *coherent philosophy* without which efforts promoting education appropriate to a sustainable world are likely to 'remain relatively small, uncoordinated and theoretically diverse'.

Green undercurrents

Such a philosophy is, I believe, increasingly taking shape beneath the current public debate over specific environmental issues. It is manifested in a growing literature and interest in such interrelated

areas as Third World equity, environmental rehabilitation, holistic health, organic agriculture, cooperative work, community based economics, responsible consumerism, conflict resolution and peace, real democracy, the interface between holistic science and green theology, and so on. It is therefore far more significant than a narrowly perceived environmentalism. To outline the basis of this philosophy here, one risks oversimplification, yet at this juncture it is vital to first see the metaphoric wood as a whole rather than analyse a few trees in its midst.

Many writers interpret the new interest in green matters as symptomatic of a deeper shift in our cultural values and norms. We are, they suggest - and whether we are conscious of it or not - in the throes of a fundamental change of collective worldview, equivalent in scale to the scientific revolution of the 17th century which overthrew the medieval worldview (Capra, 1982), and driven by increasing awareness of the huge ecological and personal cost of an unsustainable global system. Certainly, such a grand theory explains a good deal, including the confusion, uncertainty and clashes of values that might be expected from such elemental change, both between upholders of the old order and the fledgling new (see Cotgrove, 1982), and indeed even between those struggling with the articulation, meaning, and implications of the new worldview (see Porrit and Winner, 1988). Thus there are undoubtedly several shades of green, the most important distinction perhaps being between the 'light greens' who are interested in single issue reforms, and who may be seen as having their roots in the prevailing worldview and order, and the 'dark greens' who see the necessity for a wholescale change in values and practices if we are to achieve a sustainable and liveable earth. O'Riordan's model of two fundamental positions of worldviews is very useful here (Figure 1). He makes a distinction between a 'technocentric' orientation and an 'ecocentric orientation, both of which give rise to suborientations. (O'Riordan, 1983).

Figure 1 *Perspectives on the human/environment relationship*

HOLISTIC		REDUCTIONIST	
Ecocentric		Technocentric	
Deep Ecology	Soft technology	Managerial	Cornucopian (business as usual)
'Dark(er) Green'	'Dark Green'	'Light Green'	Non green - 'grey'

(Adapted and simplified from O'Riordan, 1983).

Breaking out of past patterns

The shift urged by the 'dark greens' is no less than a change in the way we see the world and reality. Every person holds a worldview which is both individual (different) and cultural (shared) which shapes belief, thinking and action in a way which has a measure of internal consistency. This means that, given certain - often unexamined - assumptions, a whole pattern of mutually interacting ideas and practices follow. In society as a whole, then, such a pattern may be discerned which runs throughout the major institutions and practices, including education. This pattern is so familiar, it is hardly examined at a fundamental level. Indeed, such a critical perspective is inherently difficult as it involves questioning the very foundations from which ideas are normally evaluated.

From the above, it may be seen that 'light greens' do not, at least initially, question the prevailing worldview beyond modifying present social norms to accommodate environmental concerns (for example, switching to the use of 'ozone friendly' aerosol cans). Much of the current debate is essentially 'light green' in this sense. On the other hand, 'dark greens' envisage and are attempting to articulate an alternative worldview which necessarily gives rise to a whole set of alternative ideas and practices.

Although they are still in an evolutionary phase, ecocentric ideas inevitably challenge the established order at a fundamental level. Greens insist that the holistic, ecocentric worldview is not so much alternative as imperative if we are to halt the slide towards planetary suicide. A few years ago, such a view would have been seen as unacceptably radical and alarmist, but there is a large measure of accord between this and the Brundtland report's insistence:

> 'the next few decades are crucial. The time has come to break out of past patterns. Attempts to maintain social and ecological stability through old approaches to development and environmental protection will increase stability ... the security, well-being, and very survival of the planet depend on changes, now'.

It is interesting to note that O'Riordan in 1983 anticipated these shifts of position. He thus recognised that the focus had already moved from that of the 'business as usual' unbridled technocentrist who was 'a dying breed', towards a new variety of responsible environmental manager. Even this approach, he said, may be 'quite unsatisfactory for the longer term' but predicted that 'severe ecosystem damage will have to become far more noticeable and alarming before more far reaching transformations can take place'.

The current crop of issues, noticeably the implications of damage to the ozone layer and the greenhouse effect suggest that we have reached, or have nearly reached, such a point. Is it possible to achieve a sufficiently ecocentric position while there is still time?

Holism as the basis of change

The above discussion begs the question of what constitutes the basis of a new ecocentric worldview. In sum, the prevailing worldview is essentially mechanistic and reductionist and the pattern of thinking and practice which it gives rise to is narrow and fragmentary. The green worldview by contrast is ecological and holistic and the pattern of thinking to which it gives rise is broad and integrative.

These few key words hold enormous implications that are not possible to discuss in a short essay, which must then be confined to a brief outline of the main argument. The paramount concept is that holism sees the world in terms of interacting and interdependent 'whole systems', rather than separate and competing entities. The quality of the interrelationships involved defines the well-being of systems, and they cannot be understood without reference to this dynamic context. Thus, we need to recognise that the health and integrity (or wholeness) of any entity, from cell to organism, from family to community, from classroom to school, from ecosystem to planet, from local economy to global economy, depends on the health of its subsystems and metasystems of which it is a part. Thus, the integrity, health, wholeness of any system is bound up with the integrity of the subsystems and metasystems to which it is related, and they cannot meaningfully be separated out.

Such thinking is fundamental to Lovelock's Gaia theory (Lovelock, 1979) which is rapidly becoming more accepted as an accurate model of the interaction of all organisms and life-support systems, and is also reflected in an emerging integrative and holistic science. (See Davies, 1987.) This thinking emphasises the key principle of self-organisation and regulation in matter, energy and systems. Gaian theory is one element of a growing convergence between the explanations and ideas of those at the forefront of holistic science and a rediscovered spirituality and theology (eg Weber, 1986).

This way of thinking is radically different from that of the Western techno-scientific worldview which has dominated both Western and most other cultures. Greens maintain that the latter is no longer adequate as a framework for understanding and action in the world. It is deficient, and therefore inevitably dysfunctional in terms of its total effects. As the physicist Bohm says, 'it is not an accident that our fragmentary form of thought is leading to such a widespread range of crises - social, political, economic, ecological, psychological ... such a mode of thought implies unending development of chaotic and meaningless conflict' (Bohm, 1980).

Part of this fragmentation is the reductionist emphasis on one side of reality. We see the world in terms of dualities, but nearly always emphasize one pole at the expense of the other: for example, intellect over intuition; analysis over synthesis; mind over body; me over you; us over them; masculine over feminine; quantitative over qualitative;

material over spiritual; economy over ecology; First World over Third World; humanity over nature. This imbalance is further exacerbated by an outer-directed, expansionist, and exploitative approach.

We thus impose a fragmented view onto an intimately connected reality and by so doing, produce distortions and fragmentation both in the world - and in ourselves in terms of physical, mental and spiritual health. As the Brundtland Report says, 'Ecology and economy are becoming ever more interwoven - locally, regionally, nationally, and globally - into a seamless net of causes and effects'. Yet through the concentration and intensive use of political, economic and technological power, and by vastly increasing energy flows and materials transfer, the dominant technocentric mode tends to break down both ecological and cultural integrity, complexity and diversity, thereby reducing the ability of systems to self-regulate and increasing their dependency and vulnerability. Whilst this is a generalisation, and there are specific exceptions, it is important to recognise this overall pattern which applies from the local level (microcosm) to the global (macrocosm). *Figure 2* summarises and contrasts the general pattern of effects of a reductionist/technocentric paradigm and a holistic/ecocentric paradigm.

Figure 2 *Effects of cultural paradigms*

TECHNOCENTRIC paradigm	**ECOCENTRIC paradigm**
tends to encourage: (intentionally or inadvertently)	seeks to encourage:
Uniformity	Diversity
Fragmentation	Integration
Division and competition	Unity, cooperation, symbiosis
Overdependence	Interdependence from a basis of autonomy
Damage to self-sustaining abilities	Development or enhancement of self-sustaining abilities
Vulnerability	Stability

IN

↓

Persons; landscapes; cultures; economies; ecosystems

Thus, the disappearance of family-owned shops in the High Street, the creation of agribusiness landscapes, the worsening of poverty in developed and less developed nations, the continuing destruction of genetic diversity, the spread of deserts, the destruction of traditional lifestyles and economies, Third World debt, widespread psychosocial problems, gross local and planetary pollution are just a few of the disparate but logically and systemically interrelated consequences of the predominant Western worldview and its associated political and economic systems.

In sum, a limited view of reality and the pursuance of narrowly perceived goals based on limited criteria of success (such as maximum profitability) are increasing entropy of all kinds, in the total system, and this threatens even those limited goals. However, such entropy is now forcing an increased awareness of the systemic interactions across time and space that accompany human activity, of the links between apparently unconnected factors, of the need to adopt an integrative perspective, of the flaws in commonly accepted 'immutable' assumptions, and of the distorting effects of social and economic inequality and injustice. Before considering the implications of these issues for education it may be illuminating to consider briefly the contribution that the red/green debate has made to our understanding.

The red/green debate

Much of the radical education debate has been led by the red/green perspective. This is primarily socialist, but heavily tinged by a green view. I find myself in sympathy with this position, including some of its criticisms of the green perspective (Huckle, 1986) although they are normally only valid apropos the 'light green' position. However, I also feel that it represents an insufficient view.

Red/greens put the emphasis on the social and economic structures, and in particular the role of capitalism in the degradation of the earth, and in the disempowerment of people. They advocate decentralisation, local empowerment and the principles of ecodevelopment including social and economic justice.

So far there is no essential contradiction here between a 'green/green' and 'red/green' position. However, while space only permits the briefest mention, there are some key differences of perspective. For example:

(i) Some red/greens, in my view, tend to see nature in rather limited, and dualistic human-nature terms (Weston, 1986) rather than holistic terms which emphasise a total systemic integrative approach. Valuable insights and principles such as

integrity and unity-in-diversity which should complement the 'red' principle of equity, are therefore lost.

(ii) By putting the emphasis on the role of capitalism, red/greens tend to undervalue the importance and interaction of personal and inner well-being in relation to human and natural systems. Greens, however, see this interrelationship as a vital area of concern, not in isolation, but in relation to wider efforts to improve society as a whole - they are two sides of the same coin.

(iii) While the red/green position's contribution on political and economic realities has been invaluable in many respects, the emphasis on the excesses of capitalism tends to underplay the deeper cultural crisis which permits and shapes this excess.

In sum, the red/green perspective is a necessary but insufficient analysis and prescription, which to some extent, is still rooted in a reductionist mode of thinking.

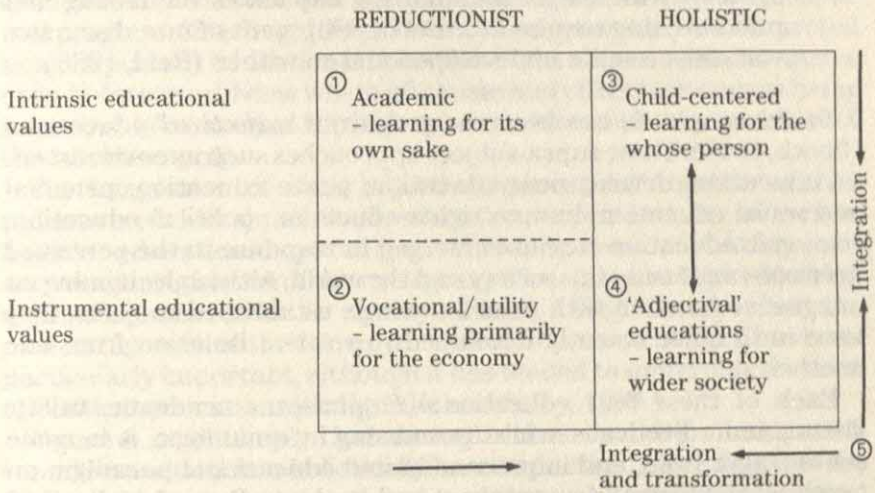
Some of this conflict is apparent in the recent debate between 'spiritual' or 'deep ecology' and 'social ecology' specifically in the USA and among the German Greens (Porritt and Winner, 1988). It is interesting that even within green thinking there is a 'reductionist' split between these two emphases. They are not irreconcilable, however, each perhaps providing what is missing from the other. From a holistic point of view the well-being of the individual, the community, of humanity and the natural world must be seen as simultaneously and mutually interactive. Thus, the individual's interest (supposedly beloved, but often misrepresented by capitalism), the collective interest (championed by socialism), and the ecological interest (asserted by environmentalists) are mutually interdependent and each interest is redefined by this interdependence. Currently, however, dominant modes of social and economic organisation impose costs on all three.

The multifaceted crises which are now ensuing may force more constructive agreement, and hopefully action, amongst the shades of the green spectrum, both in society and in education. Meantime, as Lacey (1987) says, 'the long-term disaster that awaits us is as indifferent to socialist rhetoric as it is to capitalistm ideology'.

Towards an holistic educational paradigm

As suggested earlier, educational ideas, goals and practices are inevitably shaped by the prevailing worldview. Indeed, the reductionist tradition has been in evidence for a long time, and its latest manifestations in the Education Reform Act represent a shift of emphasis within the same parameters, rather than any radical change. The educational models that have predominated are, predictably, entirely consistent with the sub-worldviews that have

Figure 3 *Educational paradigms*



underlain them, and importantly, tend to sustain them.

Figure 3 summarises the changes. Thus, we might first distinguish three fundamental emphases, which, although overlapping to a greater degree than the diagram suggests, nevertheless can be usefully distinguished. The tensions of the last twenty or so years in education may be interpreted, at least in part, in terms of the battles taking place between these three major emphases. From a radical point of view, none of these emphases adequately serves desirable change in society, but instead tends to reinforce the existing order. Even the liberal model has been criticised on these grounds.

1. The *academic* tradition characterised by rigid subject division, 'value-free' learning, didactic methods, emphasis on cognitive learning, and virtually no contact or relation with the broader world either physically or in content;
2. The *liberal* tradition characterised by child-centered learning, a degree of subject inegration, 'progressive' methods, and some limited contact with the wider world outside the classroom;
3. The current *utilitarian* phase marked by an emphasis on vocationalism, a combination of defined subject boundaries and cross-disciplinarity, combination of didactic and 'hands-on' teaching methods, contact outside school particularly with commerce and industry. Emphasis on utility subjects and discursive knowledge - largely seen as 'value-free' or as intentionally reflecting capitalist and nationalist values. An attempt is made to make academic subjects 'more relevant to the real

world' which primarily means economic life. The development of non-discursive knowledge and understanding are largely excluded with the result that 'the capacities for feeling and understanding required for the development of non-discursive awareness remain undeveloped and so wither' (Reid, 1986).

A fourth emphasis has been the growth of '*adjectival*' educations (Booth, 1987). These supra-subject approaches such as environmental education, development education, peace education, personal and social education, human rights education, political education, economic education etc have emerged in response to the perceived needs of - and issues in - society and the world. Although claiming an integrative function with regard to single established subjects, they have until quite recently developed in relative isolation from one another.

Each of these four educational emphases - academic, utility, liberal, and adjectival - whilst possessing internal logic, is in some sense fragmented, and imposes a limited educational paradigm on teaching and learning, on teachers and students. Even the adjectival educations have been constrained and shaped by the reductionist environment which they have tried to influence (Greig, 1987). However, there is now a fifth movement emerging - despite the strictures of and weight behind the current vocational emphasis.

This *holistic* movement attempts to integrate intrinsic and instrumental values in education and by so doing, enrich both. Building on the liberal tradition, it attempts to balance cognitive and effective learning, thinking and feeling, and develop active and experiential learning techniques. Knowledge is seen as value-laden, and thus the relationship between subject/object and between fact/value is recognised. Subject boundaries are regarded as arbitrary and flexible. The importance of the education of the whole child - including catering for creative, physical, intellectual, emotional and spiritual needs - is seen as vital to the well-being of a healthy society and environment and vice versa. Such an integrative view also necessarily takes full account of the connections within and between the inner/outer, school/community, person/planet, present/future, and local/global dimensions of issues and concerns. Key educational aims and objectives include the development of: the potential of each student, understanding of the role of individual and cultural world-views, understanding the world systemically and of the consequences of actions, real responsibility, concern and appropriate skills. There are implications for teaching methodology (which should largely be participative), and school structures (which should be non-hierarchical). (Greig, Pike and Selby, 1987.)

An important phenomenon in the recent evolution of this movement has been the convergence of the 'adjectival educations'. Thus,

they have begun to show signs of recognising their commonality and mutal interest - of seeing that they all contain, or should contain, elements of each other, and need to work together if they are to make real progress. (Sterling, 1988.) Their convergence can be interpreted as an important educational reflection of the wider social emergence of an holistic worldview where all causes and effects are seen as being inextricably connected through systemic interaction - regardless of the label we apply.

The integration of these adjectival 'educations' together with a rediscovered learner-centred education, represents an authentic holistic educational paradigm. There is now mounting and encouraging evidence of the emergency of such a paradigm reflecting a broader movement in society (Hicks, 1988). In my view, the pioneering work of the Centre for Global Education at York has been particularly important, although it has tended to underplay the area of political education. (Greig, Pike and Selby, 1989.)

Figure 3 might imply that the reductionist modes of education would be omitted in a holistically based eduction. I feel that, ideally, they would be encompassed and transformed by the holistic paradign. To some degree, this has already happened with many single disciplines and cross-curricular subjects showing a broader approach. However, a complete holistic synthesis is unlikely to precede 'greening' in wider society.

Greening in society and education

As environmental and related issues bite deeper, as they are likely to do, the measure needed to tackle them will have to become more radical and far-reaching and this is likely to lead to confusion amongst established institutions locked into existing mental, political and economic frameworks. For many people, however, the inevitable contradictions and tensions between ecocentric and technocentric perspectives, the costs of pushing against environmental limits, and the connections between apparently disparate factors will become increasingly evident. It will become clear that the real issues do not lie in choosing between development and conservation or people and environment as antagonistic opposites, but in how the two can be brought together and be *truly* integrated and balanced as a total system. Or, more starkly, 'the realisation will dawn that solving the planet's problems is going to require breathtakingly radical action and international action on a scale not seen since the Second World War' (Porrit and Winner, 1988).

Such increased awareness is likely to lead to a growing demand amongst various sectors of society for such things as materials recycling, energy and materials conservation, renewable energy strategies, healthy local economics and communities, a reduction in

the production and use of toxic materials, human scale environmental design and institutions, fair trading terms for the Third World, non-exploitation of disadvantaged groups and threatened environments at home and abroad, the development of safe and renewable technologies, international cooperation on pressing issues and so on. (See, for example, Greenpeace, 1989.) In other words, a further weakening of the reductionist worldview towards a more balanced, integrative, holistic view.

The tensions and upheaval involved in achieving such change may be considerable if progress is to be any more than token. Yet pressing issues are already suggesting that the costs of not reconstructing society on a green basis will be considerably greater. More and more people are realising, particularly at an intuitive level, that there is a worrying disjunction between where we are, and where we need to be. As Meadows has said, 'Just within our grasp, accessible through our innate systems understanding, are sufficiency, peace, equity and sustainability.' (Meadows, 1982.) It may be that education - if it can rescue itself from the reductionist paradigm - could have a vital role in bringing out this intuitive knowledge, so that it may balance and constrain the excesses of unchecked rationalism, objectivism, and technological optimism.

Until very recently, the debate in radical education circles was how far education could hope to encourage desirable change in society. Many concluded, albeit reluctantly, that it could only follow changes in the wider society (Pepper, 1984). Ironically, in the formal sector at least, we now face the possibility of radical debate and change in society preceding corresponding change in education, particularly as the edicts of the national curriculum are likely to reinforce the instrumental and vocational paradigm.

In this situation, it seems clear that the emerging holistic educational paradign must now realise its coherence and assert its ideas and methodologies, confident that, as Williams (1988) says, 'in the medium term it may only be a question of how long educational systems can hold out against the pressure of an idea whose time is rapidly arriving'. It must work to 're-vision' and 'green' education so that today's children - let alone tomorrow's - are socially and environmentally aware, self-reliant, critical, creative, confident, flexible, deeply empathetic to themselves, others and the environment, and empowered through appropriate skills, knowedge and values to create a better, greener world.

References

Boulding, K. (1978) *Ecodynamics - A New Theory of Societal Evolution.* Sage Publications, Beverley Hills and London.

Bohm, D. (1983) *Wholeness and the Implicate Order.* Ark Paperbacks, London.

Booth, R. (1987) 'Thoughts after Moscow' *Annual Review of Environmental Education* **1**, Council for Environmental Education.

Brown, L. (1988) *State of the World*, W.W. Norton.

Capra, F. (1982) *The Turning Point.* Wildwood House, London.

Cotgrove, S. (1982) *Catastrophe or Cornucopia.* John Wiley and Sons.

Davies, P. (1987) *The Cosmic Blueprint.* Unwin.

Greenpeace, (1989) *Greenpeace News*, Spring. (Contains details of a 'Green Gauntlet' of 30 measures aimed at tackling environmental issues, launched jointly by Greenpeace, Friends of the Earth and the World Wide Fund for Nature.)

Grieg, S. (1987) *Global Impact Project – survey report.* Centre for Global Education, York.

Grieg, S., Pike, G. and Selby, D. (1987) *Earthrights.* WWF/Kogan Page, London.

Grieg, S., Pike, G. and Selby, D. (1989) *Greenprints for Changing Schools*, WWF/Kogan Page, London. (Published just after this essay was written, *Greenprints* is a detailed presentation of change in education, based on holistic thinking.)

Hicks, D. (1988) 'Changing Paradigms' in Hicks, D. (ed) *Education for Peace.* Routledge, London.

Huckle, J. (1986) 'Ten red questions to ask green teachers' *Green Teacher* **2**, December.

Lacey, C. (1987) 'Introduction', in Lacey, C. and Williams, R. (eds), *Education, Ecology and Development.* WWF/Kogan Page, London.

Lovelock, J. (1974) *Gaia: A New Look at the Earth.* Oxford Unviversity Press.

Meadows, D. (1982) 'Whole Earth Models and Systems' *The CoEvolution Quarterly*, Summer.

O'Riordan, T. (1983) 'The nature of the environmental idea', in O'Riordan and Turner, R., *An Annotated Reader in Environmental Management and Planning.* Pergamon Press, Oxford.

Pepper, D. (1984) *The Roots of Modern Environmentalism.* Croom Helm, London.

Porritt, J. and Winner, D. (1988) *The Coming of the Greens.* Fontana, London.

Reid, L.A. (1986) *Ways of Understanding and Education.* Heinemann Educational Books, London.

Sterling, S. (1988) 'Getting our act together – strategies for global education' Unpublished paper reporting on the *Education for Global Futures* conference of March, 1988, and delivered to an Education Network Project seminar, Sussex, 6 July, 1988.

Weber, R. (1986) *Dialogues with Scientists and Sages: the search for unity.* Routledge and Kegan Paul, London.

Weston, J. (1986) 'The Greens, Nature and the Social Environment' in Weston, J. *Red and Green.* Pluto Press, London.

Williams, R. (1988) *The Network Newsletter 2*, Education Network Project, University of Sussex.

World Commission on Environment and Development (1987) *Our Common Future*. Oxford University Press.

Chapter 8

DEVELOPMENT EDUCATION: A RADICAL DIMENSION OF EDUCATION?

Anthony Hopkin

Overview

Two decades ago an ideological assault was launched on schooling and what it did to people. This was at the time when countries, notably the 'Third World' countries, were allocating increasing amounts of their resources to expanding their school systems. This increase was both absolute and relative and, whilst there was a subsequent levelling off, expenditure on schooling continued to dominate the budgets of most developing and developed countries. What had happened was that education was perceived by the less developed countries as the key to rapid development and the means of catching up with the developed world. In this they were encouraged by major international agencies, such as UNESCO and the World Bank, and prominent aid donors, including the UK, the USA, France and Australia. 'Education' had been elevated to an industry and to an integral component of the competitive materialism being promoted throughout the world.

It was as a backlash to these latter factors that the assault referred to above took place. The formidable intellect and physical presence of Ivan Illich (1971) led the way, Paulo Friere's (1976) passion and commitment was brought to bear, and Everett Reimer (1971) provided a more dispassionate analysis of the adverse effects of mass schooling. The theme was taken up by others and new perspectives added. Writers such as Richard D'aeth (1975), Renée Dumont (1985), and Adam Curle (1973) later pointed out the insidious effects that neo-colonialistic education had upon cultures, lifestyles, and aspirations, at both the personal and national levels. This radical reaction to the promotion of schooling as a major tool for 'development' has included academics and educators from the lesser developed countries, notably Julius Nyerere (1969). The effects of this reaction are impossible to quantify. What cannot be denied is

that as a result of the reaction there is today a much greater propensity to assess and to take into account the ideological dimensions of schooling.

A basic premise of this Chapter is that Development Education (DE) is a part of this radical reaction and is essentially concerned with the ideological dimensions of education in the widest sense of these words. I will be concerned with the provenance and meaning of DE and also provide a descriptive analysis of it in operation, using Wales as the field of study. Using case studies derived from the Welsh experinece a conceptual rationale for its inclusion in the school curriculum is then offered. The advantages and disadvantages of the piecemeal approach to the promotion of DE are considered and a more systematic strategy is advocated, incorporating teacher education and the Non Government Organisations involved in DE I conclude with a brief discourse on the current and future prospects for this dimension of the school curriculum.

For the purpose of this chapter Development Education is understood to be an educational process which increases the individual's awareness and understanding of development and underdevelopment in respect to social, economic and political conditions at the personal, local, national, and international levels. It is not concerned solely with developing countries but does deal with the reasons for their underdevelopment and the importance and nature of interdependence, particularly between the North and the South. Important basic premises are that the images of the South are positive and that underdevelopment is a factor that is present in the North as well as in the South. An area of contention is whether the development educator should be concerned with stirring his or her charges to take action with respect to the issues involved. This was the stance of the original Advisory Committee to the Overseas Development Administration which provided guidelines on such matters. However, my own position is that action on the part of the educated is not the province of the development educator as I will consider later. What is accepted is that this dimension of education should permeate the curriculum and that it is primarily concerned with the affective domain and the formation of attitudes. In effect, it deals in many ways with moral aspects of education, that is, the relationships between individuals and groups and how they impinge one upon the other. It is probably these aspects of Development Education that cause many teachers to shun it and has made it the subject of controversy.

Development Education has evolved out of, and still compounds, a number of related strands in education systems. The term was coined in the earlier seventies and was promoted by UNESCO as a means of permeating schools in order to further the international dimension in education and the cause of peace through greater

understanding between peoples. It was taken up in the UK mainly by the aid agencies and these have been primarily responsible for it remaining on the agenda as part of the school curriculum. The last Labour govenment did committ itself to the funding of Development Education but this was discontinued in 1979 when it left office. Since then financial support has been provided for two resource centres, one in London and the other in Scotland, but this is relatively small, currently about £140,000. Modest financial support has been channelled through some Non Government Agencies and some funds have come from EEC organisations.

The sorry picture is that, in respect to the funding of Development Education, the British Government has the worst record in Europe and possibly in the Western world (Continuing Committee, 1987). This important area of the education of British children has been delegated to Non Government bodies or to those who feel a commitment to it. The Non Government Organisations (NGOs) have responded well to the challenge and spent around £2,500,000 on it in 1987 (Arnold, 1988). Christian Aid commits 10% of its aid budget to Development Education. But this is all done in piecemeal fashion and much of it smacks of charity and good works to the detriment of Development Education as a legitimate part of the school curriculum. This in no way reflects adversely upon the work and commitment of the agencies: it is an indictment of the failure of the Government and the institutions involved in formal education to be concerned with aspects of education of vital concern to this country and to its citizens today and tomorrow.

Nevertheless some progress has been made in the last decade. This is most evident if the concept of Development Education in its widest sense is considered. In some respects Development Education has been handicapped because of controversy about nomenclature and its area of concern. In my view such controversy is fruitless and inimical to the spirit of Development Education. The name is convenient and what it purports is generally understood, in spite of the possible confusion with developmental psychology. It certainly overlaps with areas such as international education, peace studies, multi-cultural education and even environmental education. But this overlapping of domains of interest is a source of strength if Development Education is seen as a perspective or concern which does legitimately involve itself with a variety of fields across the spectrum of the curriculum. The important thing is that there is a shared objective that the individual becomes more aware of development and under-development and the causes of these. To date Development Education has been and is of marginal concern in the curriculum in most British schools. This can only end if its proponents are prepared to engage in dialogue with those involved in both related and what may currently be considered as diverse or

even different fields. Too much concern with semantics or the defining and mapping of zones of study is and will be counter-productive.

Progress has certainly been made in the field of Development Education in the United Kingdom and Europe in the last decade. Networks have been established at local, national and international levels. For any teacher who whishes to become involved in teaching in the field of Development Education there is an infrastructure now available to provide resources and assistance for he or she to do so.

A Case Study

Wales exemplifies this and illustrates how Development Education can become established in the school system and the potential it has for expansion. There are a number of factors which give Wales a distinct advantage in respect to the promotion of new dimensions in education. The most obvious one is the homogeneity that has resulted from the Welsh historical experience as a nation. Institutional factors, such as the Welsh language and the University of Wales, also contribute to this homogeneity. The Welsh Joint Education Committee is an organisation that facilitates provision for common elements in the curriculum in a way that is not to be found elsewhere in the United Kingdom. Non Government Organisations, such as the Welsh Centre for International Affairs, the distinctive Welsh sections of Oxfam and Christian Aid, and CEWC/CYMRU are all expected to promote Development Education in Wales as part of their activities. The Welsh Advisory Committee for Development Education has undertaken to act as a liaison body which aims at co-ordinating activities in this field. Perhaps most important is the size of Wales. Communications are relatively easy and, with a population of just two and a half million, it is inevitable that people working in similar fields soon get to know each other. Perhaps due to this ease of personal contact Wales has not experienced the forming of factions working in fields related to Development Education as has been the case in England. Relative smallness can be an advantage when educational change and reform is taking place.

A comprehensive network has grown in Wales, one that covers most geographical areas and all levels of education. Resource and development centres are to be found at Maenllwyd, near Carmarthen, in Bangor and in Wrexham, and there are two in Cardiff. The way these are sponsored, organised and administered differ as does their institutional status. The one in Bangor is linked to the University and the one in Wrexham to a large Institute of Higher Education. Of the other three, one is independent, one is part of the service provided by Oxfam, and the other is part of the Welsh Centre for International Affairs. The range of activities pursued include

curriculum development, preparing materials, INSET and pre-service teacher education, the running of school conferences and competitions, and some fund-raising. As is common in the U.K. each of these organisations are distinctive and have their own characteristics. However, common denominators are the absence of long term funding and permanency in terms of staffing. Another feature common to other such centres is the commitment and dedication of the staff, many of whom are fully qualified teachers and earn far less than they would in schools or colleges. The briefs of the Welsh Centre, Oxfam and Christian Aid are designed to cover all Wales, and each is able to effect roles which enable all-Wales strategies to be developed at all levels of education (Heard, 1985a). This has been further facilitated by the work of the Advisory Committee for Development Education in Wales. Particularly valuable assistance has been provided, notably in the non-formal sector, by the Christian Aid Development Education Fund Committee, which disbursed about £16,000 in 1988/9 (Christian Aid, 1989).

One unique project that has emerged from Development Education activity in Wales was the introduction of this as a General Certificate of Education subject. This originated as the result of the work of a CEWC/CYMRU curriculum working party which was set up in the later seventies to devise ways of introducing Development Education into schools. Originally intended as a C.S.E. subject, the proposals were modified after consultation with the Welsh Joint Education Committee, and the A/O level 'World Development' syllabus was introduced in 1982 (Heard, 1985b). To my knowledge this was the first time that a public examination of this kind has been established as the result of the work of a body that was not part of the formal education sector. This is a reflection of the flexible approach of the Welsh Joint Education Committee and its officers, and is also indicative of the close professional relationships that can exist in a relatively small country like Wales.

The decision to try to establish Development Education as a subject in a public examination was only taken after prolonged discussions. There was a strong body of opinion in the working party that such a move was in direct contradiction to the ethos and underlying premises of Development Education. All members of the groups were conscious of this, some more than others. It was finally agreed that, the status accorded to examinations in the British system was such that it would be to the benefit of Development Education if it were to be accorded the status of a public examination subject. It would also ensure that as a subject area it would then be more likely to be on the agenda in respect to curriculum changes and development in schools. A more enlightened argument put forward was that the promotion of Development Education as a public examination could point the way to more effective and

enlightened examination practices.

Subsequent experience does suggest that the decision has been vindicated. In quantitative terms the examination has enjoyed modest success with nearly three hundred candidates presenting themselves in 1987/8 which reflected a steady increase. Possibly more important has been the way the examination prescription and format was used as a prototype for later developments, notably with the GCSE. A feature of the prescription was the way it identified the educational aims and the purpose of pursuing the course, as this had not generally been the practice at this level previously.

Another positive feature was that each student had to undertake a project during the course, marked by the teacher and moderated by the examiners, which counted for 20% of the final marks (Heard, 1985). It was advantageous, too, that the chief examiner insisted upon a holistic approach and this was stressed as a necessary exemplification of the multi-disciplinary nature and spirit of Development Education. A major advantage enjoyed was the establishment of a Development Education Fellowship at University College, Cardiff. This was funded through CEWC/CYMRU by Non Government Organisations over two years and the intention was that the A/O 'World Development' course would be promoted through the production of a guide for teachers and the provision of in- and pre-service support for teachers.

This Welsh Centre initiative achieved its goals through the commitment and drive of the Fellow, and ensured that the A/O level examination became established (Heard, 1985a). Recent changes have seen the retention of the subject at the mature entry GCSE level and provision is being made for it to be more widely available at the A/S level (Hopkin, 1989). An evaluation made of the examination was in a group of schools where it had been taught over four years. The conclusion reached was that the objectives had been achieved and that there had been a modification of attitudes which resulted in more positive thinking on the part of young people towards development and towards the 'developing' world (Wilcox, 1988). Experience in Wales suggests that the teaching of Development Education as a subject for public examinations is not inimical to the spirit of Development Education and that these examinations can be the vehicle for the promotion of more positive thinking about Third World and development issues.

Another feature of Development Education in Wales is that it has been introduced and taught at the tertiary level. It is available to students at the North East Wales Institute of Higher Education and also at the South Glamorgan Institute of Higher Education as part of a B.Ed. degree. At the School of Education, University of Wales College of Cardiff, it has been available since 1979 as a unit of the taught M.Ed. degree, the only Development Education course at this

level in the U.K. For example, I was responsible for introducing this course as part of the Curriculum Development option and it has been taught for ten years. About eighty students have completed the option and just over thirty have completed dissertations in this subject area under my supervision.

To date a great deal of data has accrued which provides useful information about the implementation and dissemination of Development Education in the formal sector of education, and this gives a number of pointers to practice and policy. The first most obvious one is that the existence of this type of course at this level can have a multiplier effect on the promotion of such subject areas as Development Education. A number of former students on the course are currently playing key roles in Development Education in universities, teacher training, schools, Non Government Organisations, and even as curriculum and examination development officers as far apart as Australia, Mauritius and Canada. It is impossible to quantify or to attribute the effects of the impact of a course in respect to later career development but informal evaluation and feedback do suggest that the course did help, to some degree, determine later practice and commitment to such a subject area. What is obvious is that if Development Education is not available at this level then an important means of furthering it is lost.

The more immediate effects are more tangible. Students on the course, the majority of whom are part-time, are expected to reflect critically on their practice and to develop and implement teaching and learning strategies to be used in their classrooms. One result of this has been the development of teaching units that exemplify Development Education and which have been successfully implemented in the students' classrooms. In recent years there has been no written examination and the excellence of some of the Development Education units that have been produced in lieu of the examination have made it clear that this is a much superior mode of evaluation at this level than is the conventional three hour paper.

Another obvious way in which the impact of the course on classroom practice and involvement can be gauged is through the M.Ed. dissertations in this field. In all about thirty have been completed under the supervision of the writer. The requirement is that these be no more than 20,000 words, excluding appendices, but in practice the length is usually about 25,000 words. The students have been encouraged to follow a common pattern partly so that the dissertations make up a mosaic which the writer or others can use as a resource for the evaluation of Development Education in practice. The dissertations are based on Development Education units, devised by the students, and implemented by them as part of their teaching responsibilities in their classrooms or schools. These units, extended normally from six weeks to a term, are assessed and

evaluated in terms of their impact on the pupils or students, the pedagogical effectiveness of the unit, the practical and ideological problems in implementing the unit, and the feasibility of incorporating such a dimension in the classroom practice of the individual student. The writing up of this project constitutes the dissertation which would also include the conventional academic requirements such as a review of the appropriate literature and rationale for the study.

These dissertations constitute an invaluable repository of records of Development Education in action and provide positive evidence that it is possible to incorporate this dimension in classrooms in the United Kingdom. This can be done over a wide range of subjects and at all levels. Project work is most suitable for it at the primary level, whether this is one based on an overseas country such as India (Draisey, 1983) or one based on water supply in Wales (Davies, 1985). At the lower secondary level it can be introduced as part of a general approach (Crane, 1982), as a geography unit (Pritchard, 1985), to teach about communism in History (Bates, 1981) or about diet in Home Economics (Davies-Scott, 1985), or as part of a French course (Taverner, 1988). A similar variety can be found at the middle secondary level. Thomas (1982) and Carpenter (1989) used Religious Education as a means of introducing it, it was incorporated as part of an O Level Geography course by Griffiths (1982), and Wilcox (1988) used a unit of the A/O level 'World Development' course as the basis of her dissertation. In the sixth form at A level, Scott (1985) has incorporated it into a Geography course, Jones (1986) taught it in Economics, and Thomas (1982) found it an easy matter to introduce it into his History course leading to the International Baccalaureate examination. At a more general level Davies (1982) introduced Development Education successfully to sixth formers as a Peace Studies unit and Slade (1984) found that both staff in his large Science department and his sixth form Science students in general wanted a Development Education dimension introduced into Science at the sixth form level. At the tertiary level Williams (1984) used a Development Education unit in a B.Ed. Philosophy course as a pilot scheme whereby it later became a regular feature of the B.Ed. programme. Wheatley (1982) and Jenkins (1982) also incorporated this area in diploma courses in the social welfare field and Keel (1981) used it as part of a General Studies course in a Further Education college. The present writer's experience and practice suggest that it can also be included in first and higher degree programmes. From the sample above it is evident that Development Education can be taught over a wide range of subjects and at all levels of education.

Another interesting facet of the work done for dissertations at Cardiff is that dealing with evaluation and assessment. Each student

has had to derive appropriate means of determining whether the aims and objectives set have been achieved or not. Because of the involvement and commitment shown by the students this has not merely been for academic purposes, whereby the requirements of an academic dissertation have to met. Genuine interest has been shown as to whether the developmental dimension has succeeded in the widest sense and whether the attitudes of their students have been changed as a result of their teaching. Because each unit was different, and because the subjects and ages dealt with were wide ranging, it has not been possible for any one assessment tool to be used or even a selected cluster of them. They had to be evolved in accord with the unit and the pupils being taught. There were common elements in the procedures followed. Normally tests or measures were used as appropriate to assess the attitudes and knowledge of those participating both before and after the teaching of the unit. In this way a pattern of the gains or changes could be assessed or identified. These tests ranged from questionnaires incorporating a variety of statements and questions, which were used to measure cognitive gains or affective changes, for those of a suitable age, to open-ended essays and compositions and the drawing of pictures when this was more suitable.

The value of these modes of assessment was that they provided a quantitative element which afforded the opportunity to establish the degree to which change had taken place, if any, through the presentation of simple descriptive statistics. This was supplemented in most cases by the keeping of a teaching diary which was used to record the 'administrivia' and associated problems of the unit, the day to day responses of the pupils to the methodology being employed, the impressions of the responses of the pupils, and to retain the ambit of the unit for future reference. Of particular importance was the effort to evaluate the unit through the eyes of the pupils, many of whom expressed surprise that a teacher was actually taking heed of what they thought about what was being taught, and how! This latter pattern of evaluation comes under the umbrella of what is referred to as 'illuminative evaluation' (Stenhouse, 1975).

It is acknowledged that there has been a great deal of subjectivity in the methods of evaluation and assessment used but this does not invalidate the legitimacy of the findings in general. What has to be borne in mind is that those responsible did complement their illuminative approach with quantitative data and, more important, were all experienced professional teachers prepared to spend time and often money in their efforts to improve themselves professionally. Their views and knowledge of what was going on in their classrooms was generally far more profound and was characterised by greater insight than would be so in the case of most professional researchers and observers. However, what had to be stressed at all

times was that the samples were too small for generalisations to be made as is supposedly the case with large-scale educational studies. Students were encouraged to relate their conclusions and the trends they identified to their own classrooms and practice.

A Curricular Rationale for Development Education

Nevertheless, certain generalisations can be made from the body of the studies undertaken. An important one is that it is possible to infer from the studies a rationale in curricular terms for the inclusion of Development Education in the school curriculum. An undoubted defect in the case for Development Education is that it is strong on exhortation but weak on proof, as far as the promotion of it as a dimension in the school curriculum is concerned. Too little attention has to date been paid to the theoretical and pedagogical reasons for including this component in the schooling of our young people, a component that I think has to be essential for anyone who hopes to be a responsible and sensitive citizen of the UK and of the world in the twenty-first century. The following curricular rationale has emerged from the case studies that I have supervised. Development Education should be incorporated in the curriculum of schools through a series of stages which are broadly congruent with the interests and aptitudes of younger people. These stages are the stages of naivety, of complicity, of intuition, and of advocacy.

The first stage of naivety extends roughly to the age of about twelve or thirteen years and covers the primary and lower secondary stages. This is the time when young people are most impressionable, and are almost naive when it comes to learning in school. What the school stands for and especially what the teacher says has an authority that many adults find it difficult to credit. As a consequence young people at this stage can be easily impressed whether this be for good or ill. There is considerable evidence that at this stage of their schooling the pupils have distorted perceptions of themselves and particularly of those who are from cultures and ethnic groups other than their own. It seems that the adult world, including the school, have presented them with a distorted view of the world that they carry forward with them into the next stage of their lives. This distorted picture does not come just from the school but from other agents of socialisation such as peer groups, families and the media. Draisey (1983) established that his ten year old pupils did have a distorted perception of India and the developing world. His Development Education unit was aimed at modifying this and after ten weeks of teaching the responses of the children were very different. They then expressed very different and far more realistic ideas as far as life in North India and the developing world was concerned. This and other examples have made it clear to the writer that those concerned with

Development Education at the naive stage have to concentrate upon presenting as accurate a picture of the world as is possible. In some respects this may well contradict the somewhat patronising images presented by programmes such as Blue Peter, and the doom-laden messages of some of the aid agencies, but such an antidote is necessary. To effect this the teacher has to monitor the materials he or she uses for teaching to ensure that they are free from the bias that has made much teaching material the vehicle for presenting to the child a racist and ethnocentric picture of the world. The subjects or topics that children study should enable the pupil to gain a deeper understanding of the way people live their lives in different parts of the world, and of the issues that are of immediate and universal concern, such as the supply of clean water. At this stage the Development Educator has to concentrate on establishing a cognitive base that enables the young child to have a realistic picture of the world in which he or she lives. Furthermore, at this stage the greatest impact can be made. The attitudes and concerns of younger children are immediate and the effect of introducing them to Development Education can be effective and rewarding (Draisey, 1983; Davies, 1985; Crane, 1982). To ensure that the impact is not dispersed it is important that this strand is a continuing one throughout the individual's schooling.

In a number of respects the stage of complicity is an expansion and enlargement of the stage of naivety, albeit at a more mature level. What is possibly dubious is that the inclinations and propensities of the student has to be taken advantage of at this stage. Young people from around the age of twelve or thirteen are made very aware of their pending ordeal by examination and this starts to dominate their lives. In spite of the many outward signs of dissent, most young people at this stage conform broadly to their cultural and social environment. They do their best to win recognition and approval from their peers, the school and their parents in different ways but particularly by doing well at their school subjects and in examinations. At this stage of complicity many young people begin to understand the system and what they have to do to benefit from it. Many see that it is in their interests to conform to the mores of the school.

In many respects this can be taken advantage of by the Development Educator. Rightly or wrongly examinations to be taken are perceived by young people, quite properly, as the means to better things and the fulfilment of ambitions. Little appreciation is shown with respect to the intrinsic value of the matter being studied. At this stage the Development Educator has to ensure that this dimension should permeate the subject matter being taught and that acceptable attitudes are demonstrated. In Home Economics the legitimacy of the variety of diets and child-rearing practices to be found

throughout the world has to be taught and stressed. In geography the phenomenon of urbanisation and the issue of underdevelopment have to be faced as local and world-wide issues. History has to deal with contemporary matters on a global basis and the past should no longer be treated as the story of the Anglo-Saxon peoples and the way they have run the world. Proper recognition has to be given to the contribution of the Third World in the study of the arts and literature and the context in which these have flourished. Language teaching provides excellent opportunities for young people to gain genuine insights into, and understanding of other cultures. A school visit to another country can be Development Education in action (Taverner, 1988). The new thrust in Religious education gives ample opportunites for Development Education. In the sciences issues such as pollution and the moral dimensions of scientific progress are of immediate concern to all. Recent developments in public examinations have provided ample opportunities for teachers to incorporate an international and developmental perspective, if they wish to do so (Hopkin, 1989). To date this will has been lacking, and one way of overcoming this will be considered later.

In practice there is ample opportunity for a Development Education perspective to be included at the middle secondary level. Furthermore, young people will treat it as part of their preparation for examinations. Evidence from case studies provides an interesting and reassuring picture of how young people respond to exposure to this dimension. Whilst a common feature of the results shown with respect to the teaching of units was that the cognitive gains made by pupils were considerable, this was not so as far as attitudinal changes were concerned. The findings of Griffiths (1982) and Scott (1985) were typical of the middle and upper secondary levels in that the affective and attitudinal gains were much less than were those in the cognitive domain. It was commonly observed that there was a shift to more positive attitudes on the part of those taught as far as developmental issues were concerned but in general the shift was far more modest than at the previous level. The general conclusion reached was that young people at this stage will comply in terms of the intellectual requirements of their courses or of Development Education, but they are far more circumspect when it comes to persuading them about what they should think or feel. Teachers may quite properly fear that Development Education may be a means of manipulating the feelings and attitudes of young people. It is reassuring that the evidence of the case studies under review suggest that at this age those being taught have a healthy scepticism about what is being taught and are prepared to draw their own conclusions as to what and how they should think and feel. There is no reason for the protagonists of Development Education to fear pragmatism or scepticism on the part of those taught, providing this does not

degenerate to cynicism. The important issue is that those taught have been intellectually exposed to the message and concerns of Development Education through the work they have been doing in school. It is essential that it is on the agenda to be examined, thus enhancing its intellectual credibility and legitimacy as part of the school curriculum at the middle secondary level.

The third stage, the stage of intuition, broadly coincides with the upper secondary range, that is the sixth form level. At this stage the young person really arrives at the point where he or she knows and understands the factors and elements that underlie development and under-development and on a global basis. This understanding is under-pinned by a sound knowledge of world-wide social, economic and political conditions. This knowledge of the causal nature of development and under-development is often associated with positive attitudes and feelings on the part of individuals towards the diverse people affected by these matters. That the promotion of Development Education as part of the educational experience of young people can directly contribute to this is perhaps best exemplified by the findings of Wilcox (1988) in her study of the A/O Level examination. She found that, irrespective of academic ability, after experiencing the course the students knew more about developed and developing countries, had less stereotyped images and perceptions of the world, understood the concept and significance of interdependence and were more sympathetic towards world problems. Similar findings were made by others who taught units at the sixth-form and tertiary levels. This correlation was found at this level in the teaching of History (Thomas, 1982), Geography (Scott, 1985), and Economics (Jones, 1986). Williams (1984) found that this was so in a teacher training course and Wheatley (1982) and Jenkins (1982) also found the same with students on courses leading to the award of diplomas in the field of social work. The one exception was Keel (1981) who experienced a negative response on the part of her students who were craft apprentices on a day-release course in a Technical College. Her conclusion was that the attitudes of her students were so well entrenched that the introduction of Development Education at that stage was too late and therefore ineffective. Another interesting point made by some, such as Scott (1985), was that some pupils responded in a way that they perceived the teacher wanted them to respond. However, it was evident that the researchers, all experienced teachers, were aware of this as a factor but their experience and the generally cordial relations they enjoyed with their students were enough to discount this. In reaching this stage of intuition it may be hypothesised that the young people concerned were far more globally conscious and aware in the developmental sense than they would have been had they not been exposed to Development Education units. A corollary to this is that

many of those who proceed through the British school system never become aware in the Development Education sense because they have not had the educational experience that will enable them to become so.

The last stage to be reached is the stage of advocacy. This stage reflects the individual's stance and commitment in respect to issues of development and global social and economic conditions. It is feasible that an individual who has reached the stage of intuition may pursue a life-style that is selfish, irresponsible in environmental terms, and one that takes advantage of those who are less fortunate. That an individual is globally aware and fully understands the factors underlying development and underdevelopment does not guarantee that he or she will be altruistic or socially responsible. Indeed, such individuals are better placed to exploit others. Another individual may demonstrate her or his advocacy though a life-style that demonstrates commitment to others and a real concern for the environment. This latter case is what one would hope would be the result of an education permeated by Development Education. But this last stage is not the direct concern of the school. It is the right of the individual to decide the way his or her life should be lived. It would be undemocratic and lacking in respect for the individual if the school moved beyond the third stage. It is the school's responsibility to raise individual awareness so that the individual is equipped to be a true citizen of the world: it is the individual's right to decide how he or she acts in that capacity.

Experience in Wales suggests that the inclusion of Development Education in the school curriculum can be justified on pedagogical and theoretical grounds. There is an existing infrastructure that provides support and guidance for any teacher who wishes to incorporate this dimension in his or her teaching. This supportive infrastructure also exists in the rest of the UK and is linked to the European one that exists to serve both the individual Countries and Europe as a whole. It has been argued that the public examination system affords ample opportunity to teach in a way whereby Development Education is exemplified, and this will also be the case with the national curriculum. A variety of organisations and centres have produced excellent teaching and learning material in this field, including software for computer-based activites. Yet in spite of all these positive features Development Education remains a marginal activity and peripheral to much of the work being done in British schools.

Progress and Radicalism

Progress has been made in the last decade: what must be done to ensure that momentum is not lost, or to effect more significant and

rapid inroads into the school system? In my view little more can be done as far as the teachers now teaching are concerned. In the final session of a conference in North Wales in 1988 a respected and committed member of the CEWC/CYMRU Executive Committee, a leading County Councillor, expressed his reservations. His view was that teachers had been subjected to so much current pressure to effect changes that, in the short term at least, the advocates of Development Education should concentrate on a holding operation. This advice was sensible in the context but there is also a danger that a period of relative inertia could lead to ground being lost.

To avoid this it is recommended that a new direction should be taken. In this field to date, in Wales, little attention has been paid to the pre-service education of teachers. The education officers of OXFAM and Christian Aid have been given limited access to some courses, mainly in Cardiff, but this has been on a very makeshift basis. The agencies and their officers would welcome more opportunity to play a greater part in the pre-service education of teachers as this is seen as a key element in the more rapid dissemination of Development Education, and what the agencies stand for, throughout the school system. To effect this more systematically it is intended to undertake a research and development project in Wales, if funding can be obtained. Based in the School of Education, University of Wales College of Cardiff, the project will entail a number of steps. The first will be to find out, through questionnaires and interviews, how students and staff in Welsh teacher education institutions view Development Education and how it might be included in the courses being offered. The resources and services that the Non Government Organistions can provide in Wales will be identified and an inventory drawn up. The findings will then be presented at a seminar of all the parties involved with a view to drawing up a strategy whereby the resources and personnel of the NGOs could be systematically incorporated into teacher education programmes in Wales.

The project could have a number of important outcomes. The first most obvious one would be that teacher education would have access to the major British source of funding for Development Education. The NGOs would have access to a part of the formal sector of education that would enable them to have a major impact on individuals who would later work in the schools. Each teacher education institution would be in a position to draw up a programme, in consultation with the NGOs, that would be appropriate and acceptable. The NGOs and other bodies involved with Development Education would be in a position to deploy their resources more effectively and systematically. Perhaps the most important outcome would be that the students themselves would have been exposed to this dimension of education. They would be in a position

to decide whether this area is of importance to them and whether to incorporate it in their teaching. They would be in a far better position than most teachers in schools at present as they would know about, and be able to take advantage of, the existing network available to them. If the officers of the NGOs and the staff of the teacher education institutions were to meet in this 'collegiate' manner it is probable that the latter's fears that the former would adopt a 'missionary' line would be resolved. Properly harnessed, the officers of the NGOs are probably the most satisfactory advocates of this dimension of education: it can be argued that Development Education is caught, not taught. If this were to be adopted as a way forward then the current turmoil in schools would not be relevant to the further promotion of Development Education as it would inevitably be dispersed through the system. If successful, the proposed project could be an exemplar for other countries.

An initial premise made was that Development Education was part of the radical reaction to the idea that educational expansion was to be justified primarily on economic and instrumental grounds. But this has to be qualified. From the above description and analysis it must be evident that Development Education has made progress in infiltrating the British education system in the last decade. But it is in itself not radical, despite the fact that those who oppose this dimension portray it as radical and innovative. In essence its diffusion and promotion has been characterised by pragmatism, opportunism, and a willingness on the part of its advocates to make compromises in order to make small gains. Development Education is essentially a synthesis and as such may seem inimical to truly radical thinkers such as James Hemming (1980). Writers such as he are trenchant in their criticism of school systems and the insidious way they corrupt and betray young people. But this radical stance is an idealistic one and the dreams these radicals dream will not become reality in the short and middle terms. The development educator has had to devise strategies and tactics to work in the short and middle terms, because what evolves as a result of synthesis ensures that the levels reached are higher than they were before. This synthesis means that children and young people in formal education are more likely to be exposed to this dimension than ever before, and this will probably continue. But without the dreamers dreaming their dreams there can be no synthesis. For Development Education to fully permeate the British education system compromise and pragmatism will be necessary: but this will be meaningless without the vision of the radicals.

References

Arnold, S. (1988) 'Constrained Crusaders? British Charities and Development Education' in Education Network Project (1988) *British Charities and Education* Occasional Paper No 1, University of Sussex World Wildlife Trust.

Bates, P.J. (1981) 'China and the Communist Revolution: A Development Education Curriculum Unit' Unpublished M.Ed. dissertation University College, Cardiff.

Christian Aid Welsh Development Education Fund Committee (1989) Minutes of Meeting held 4 : 3 : 1989.

Continuing Committee on Development Education (1987) *Raising the Profile of Development Education.* Oxford Continuing Committee in Development Education.

Crane, C.R. (1982) 'The Design and Development of a Unit of Development Education in a Comprehensive School' Unpublished M.Ed. dissertation University College, Cardiff.

Curle, A. (1973) *Education for Liberation.* Tavistock, London.

D'aeth, R. (1975) *Education and Development in the Third World.* Saxon House, Farnbury.

Davies, K. (1985) 'An Investigation into Development Education in the Curriculum of a South Wales Mining Valley Junior School' Unpublished M.Ed. dissertation University College, Cardiff.

Davies, P.A.D. (1984) 'Peace Studies as Development Education in the Sixth Form' Unpublished M.Ed. dissertation University College, Cardiff.

Davies-Scott, E. (1986) 'A Multi-Ethnic Approach to Nutrition Teaching in a Home Economics Department of a Comprehensive School: A Curriculum Unit in Development Education' Unpublished M.Ed. dissertation University College, Cardiff.

Draisey, A.W.G. (1983) 'An Investigation into Development Education in the Curriculum of a Small Rural School in Wales' Unpublished M.Ed. dissertation University College, Cardiff.

Freire, P. (1976) *Education: the Practice of Freedom.* Writers' and Readers' Publishing Co-operative.

Griffiths, D. (1982) 'Development Education in Geography: Incorporating Development Education in an External Examination Syllabus' Unpublished M.Ed. dissertation University College, Cardiff.

Heard, A.C. (1985a) 'Development Education and Curriculum Development: A Case Study: The A/O Level World Development' *Education for Development* 9 (1).

Heard, A.C. (1985b) *World Development A/O Level: Teachers' Guide and Handbook.* Cardiff Faculty of Education, University College, Cardiff.

Hemming, J. (1980) *Betrayal of Youth: Secondary Education Must be Changed.* London Open Forum Boyars, London.

Hopkin, A.G. (1989) *An International Dimension and Public Examinations* (In press)

Illich, I. (1971) *Deschooling Society*. Penguin, Harmondsworth.

Jenkins, G. (1982) 'The Role of a Short Residential Curriculum Unit in a Qualifying Course for Social Workers' Unpublished M.Ed. dissertation University College, Cardiff.

Jones, C.M. (1986) 'Development Economics and Economics in the Sixth Form: A Case Study' Unpublished M.Ed. dissertation University College, Cardiff.

Nyerere, J. (1969) *Freedom and Unity: Essays on Socialism*. Oxford University Press.

Pritchard, A. (1985) 'Brazil: A Case Study in Development Education' Unpublished M.Ed. dissertation University College, Cardiff.

Reimer, E. (1971) *School is Dead*. Penguin, Harmondsworth.

Scott, J.R. (1985) 'Development Education in Geography' Unpublished M.Ed. dissertation University College, Cardiff.

Slade, G.D. (1984) 'Some Controversial Issues in the Science Curriculum' Unpublished M.Ed dissertation University College, Cardiff.

Stenhouse, L. (1975) An *Introduction to Curriculum Research and Development*. Heineman, London.

Thomas, C. (1982) 'A Unit of Development Education in Religious Education for a Specific group of Pupils Aged 15 to 16 Years' Unpublished M.Ed. dissertation University College, Cardiff.

Thomas, G.V. (1982) 'The Implementation and Evaluation of a Curriculum Unit Within the Framework of the History Programme of the International Baccalaureate Examination' Unpublished M.Ed. dissertation University College, Cardiff.

Wheatley, W.G. (1982) 'The Design, Implementation and Evaluation of a Curriculum Development Unit for Liberal Studies' Unpublished M.Ed. dissertation University College, Cardiff.

Williams, S. (1984) 'National and International Perspectives in a Philosophy of Education Course at Initial Teacher Training Level' Unpublished M.Ed. dissertation University College, Cardiff.

Chapter 9

CLASSROOM APPROACHES TO ENVIRONMENT AND DEVELOPMENT EDUCATION

Annette Beard

> The world is shrinking rapidly. We share a world economy; a world environment, which is the basis for the present and future world economy; and a stake in world development and a decent, dignified human condition of life. We must learn to think globally and in a long-term perspective.[1]

To many of us an awareness of the world community in which we live, and a raising of consciousness about our interdependence is vitally important as we move towards the 21st century. As educationalists, we have an important role to play in the 'moulding of future generations'. The way in which we approach the curriculum determines the knowledge, skills, attitudes and values that will permeate culture and society. But, who are we to state that a certain body of knowledge, a range of skills, or attitudes and values are essential for life in the 1990s and even the 21st century? Who are we trying to deceive in stressing the importance of developmental and environmental issues? Who are we trying to deceive in stressing the importance of the education system in moulding future generations? Ourselves or others?

Students in educational establishments already come armed with a body of knowledge, certain skills, attitudes and values. These are the culmination of factors that perhaps play a larger part in influencing the child than the education system itself. There are endless pieces of research that indicate the strong influence that the home and peer group play. As the media expands and becomes more accessible to the masses, who are we to underestimate its influence on youngsters? As Colin Lacey (1987) stated:

> The new information networks of newspaper, radio, cinema, and television keep up a constant bombardment of information and sensation that exploits every impressionable aspect of the human species.
>
> It has effecitvely created a new total education system in which culture is

> shaped and consumption adjusted through advertisements and the penetration of the entertainment, sport and political worlds.[2]

However, education in the formal and non-formal sense is part of the child and adult's formative experiences. Within the confines of other influences these help determine the attitude and values that a person develops.

Development and environmental education is often considered to be an area of the curriculum that can be considered radical and/or controversial etc. This was recognized by Richard Barnes (1984):

> ...yet there is a sense in which education for international understanding, peace, and in dealing with the world and local conflicts, inequalities and injustices, and suggesting the question "What can be done about it?" is implicitly subversive of the ways things are...[3]

In addition it is a raising of consciousness. Students become more aware of the world in which they live and learn to have respect for the environment and the people that make up the global family. The Plowden report for primary schools suggested in paragraph 421 that:

> learning takes place through a continuous process of interaction between learner and the environment.

From this process of interaction that should be developed in the primary school, the curriculum in the secondary school should spirally develop ideas introduced, so that students realize they need to:

> TREAT THE EARTH WELL
> IT WAS NOT GIVEN TO YOU BY YOUR PARENTS
> IT WAS LOANED TO YOU BY YOUR CHILDREN.[4]

Students realise that there is interdependence in the world and that we are all responsible for the earth we are part of. Sir Keith Joseph's fourth discussion question to the Geographical Association (1985) could be interpreted as validating this approach:

> Fourth, have we got the balance between people and the environment right? Is the environment - physical or economic - not still too often presented as a controlling influence and as a determinant of human response? Is sufficient attention given to the powers of individuals and groups to change or fail to change their environments and to improve or fail to improve their living conditions through their attitudes, beliefs and efforts and through the framework of law, government and institutions within which they live?[5]

As a Head of Social Studies I have been very keen to introduce many of the ideas and approaches of development and environmental

education into the lower school curriculum. With an integrated approach and the 11–13 age range it is possible to get the students to develop a holistic understanding of the world in which we live from a historical, geographical, religious, economic, social and political perspective. Students at this age are more receptive to ideas and these then can be spirally developed throughout the secondary school curriculum. If some of the knowledge and issues concerning the world are left to later then the students will have already become narrow in their perspective. With this age group it is important to start with their immediate experience and then work outwards to approach the issue at a more complex level.

If one is to develop a curriculum that is appropriate to the world in which we live, then the department needs to operate, as one hopes the students will; there needs to be cooperation and negotiation between the members of the team and consensus with regard to the outcome. The Chinese philosopher Lao Tzu summed this up very well:

> There are leaders the people FEAR
> There are leaders the people HATE
> There are leaders the people LOVE
> But when the best leaders of all
> Have finished their work
> The people say
> We did it ourselves.

Many of the ideas in *The Global Teacher: a profile* (1983) are as applicable to the management of a department and how a head of department should view his or her team, as to the relationship between teacher and student. Particularly the statement:

> The global teacher tries to be congruent.
> S/he is alert to the dangers of structural hypocrisy in both classroom and school and of how classroom and school and teachers and institutions professing aims such as "education for democracy" and "respect for human rights" can lose credibility if there is a critical disharmony between medium and message. S/he is concerned, too, to avoid dissonance between her professional and personal life.[6]

In revising and developing the Social Studies course, I circulated to the department a series of discussion documents based on research and reading around the subject, for the team to read and 'react to'. These were my thoughts, but were only to be considered as one possible pathway to follow. There were reactions, and this helped more discussion to take place and to allow people to voice their fears and anxieties. This then helped me to decide on the process by which I would arrange the INSET sessions. As an integrated course, it needed to be respectful of the geography, history and religious

studies courses in the upper school and also what has gone before in the primary school. The INSET started by us considering what had been good and what had been bad about the Social Studies course in the past. This allowed the air to be cleared and to develop a common ground on which to plan. We then worked out our aims and objectives of the course. We looked for common objectives to the three key areas of the curriculum in terms of:

— concepts
— knowledge
— skills
— attitudes and values

and finally preferred content, from the three subject areas. Of course there is nothing to dictate that curriculum development should be dictated from above! Changes in the lower school could have implications for the upper school, particularly in trying to achieve the time allocation for the National Curriculum in this area of curriculum. Many schools are looking to integrate or to develop modular Humanities courses in the upper school as a natural progression to an integrated lower school programme, and as an answer to the demands of the National Curriculum.

In designing the course, it was felt appropriate to start each unit of

PLANNING GRID FOR MODULES:

	LOCAL	NATIONAL	GLOBAL
GEOGRAPHY			
HISTORY			
RELIGIOUS STUDIES			
OTHERS: eg. ECONOMICS			

Figure 1

work from the immediate experiences of the students, be it a module on The Family, The Community or Communities on the Move. This decision was based on the belief that students come to the classroom with some knowledge and experience, and a variety of opinions about these topics which can be shared and discussed with the class. Such topics also allow for the development of discussion from the local to the global level (see fig. 1). One purpose of this approach was to allow all students, irrespective of 'ability' and social background, to participate as equally as possible. Each module then goes on to explore historical, religious and present day examples from around the world, looking for similarities and differences from the past and present with a view to furthering understanding of the future.

Of particular importance to the department were the teaching and learning strategies to be adopted. One of the criticisms from the past was 'too much loose paper'; we wanted the course to evolve around a more active approach to learning as more successful recent introductions to the course had been:

- a slide-tape sequence from Oxfam, looking at the good images of Ethiopia and bad images of Southampton. This led to an enormous amount of reaction and discussion from classes on quite broad issues. Particularly, on the images presented of Ethiopia - positive images - as students are very influenced by the media. Prior to the slides, students had given the usual stereotypic response towards people and countries in the South. From this, followed some excellent project work on perceptions of their own settlements, and work on development;
- the Trading Game;
- the World Feast Game;
- Family History; an exploration of a package found on a demolition site that was then used as evidence to find out about a family, both past and present, and was used as a catalyst for a wide range of work, including research into their own families;[8]
- Into the Unknown, a computer simulation of the voyages of exploration in the 15th/16th century;[9]
- a visit to Brighton Musuem to handle artefacts and explore the question of how early communities survived.

Many of these had been introduced as 'trials' in anticipation of redesigning the course, to see the response of teachers and students to these packages. We wanted to employ a range of teaching/learning styles in the classroom to enable each student to enjoy and feel part of the course, particularly with some of the decisions. One possible model of curricular design for teachers to follow is shown in fig. 2.

CURRICULUM DESIGN (Lawton Model)
(A possible model to follow)

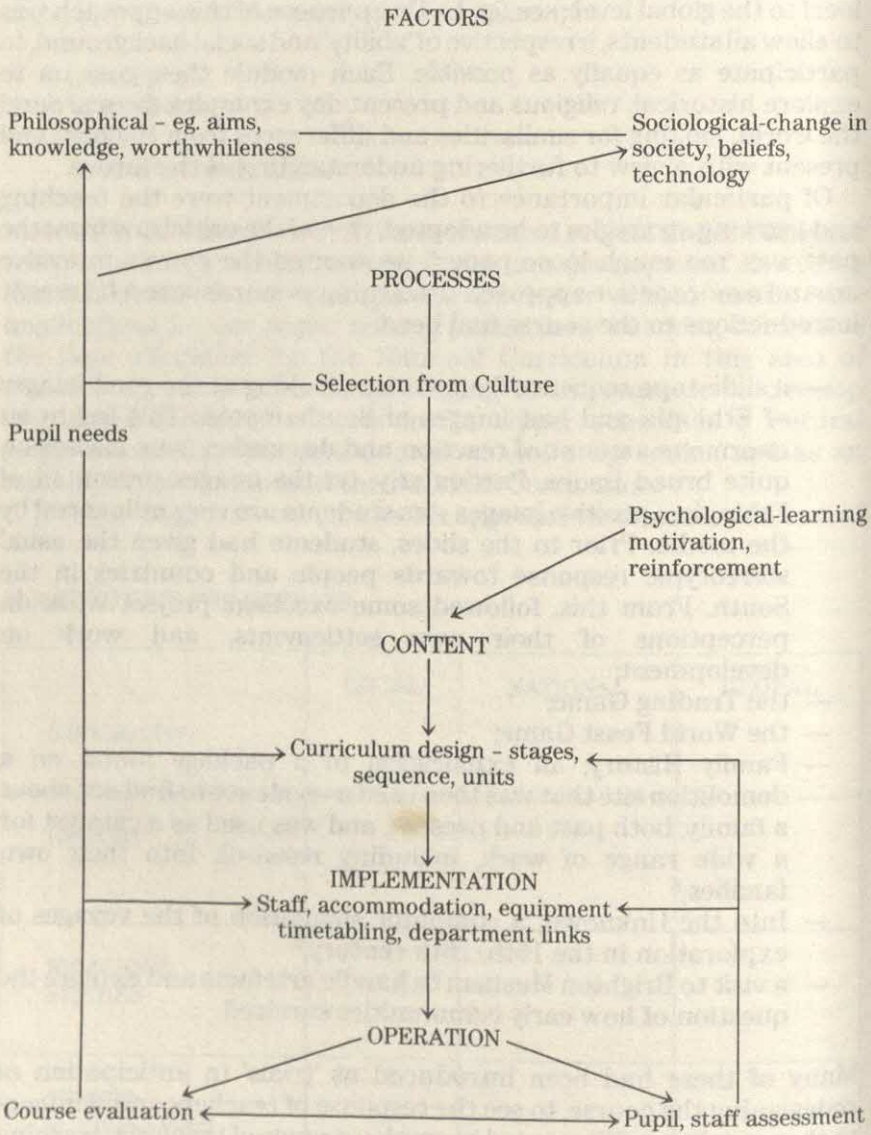


Figure 2[11]

ASSESSMENT - BASIS	
What are we trying to learn?	
OBJECTIVES	What must students learn?
LEARNING EXPERIENCES	How will they learn it?
PUPIL ASSESSMENT AND COURSE EVALUATION,	How well did they learn it?
DESIGN DEVELOPMENT	How can the course be improved?

Figure 3[11]

I can still recollect very clearly a conference I organized for students entitled 'Agenda for the Future'[10] where the students had various talks, interviewed key resource people and planned in groups their own 'Agendas for the Future'. Despite the flexibility and openendedness of the task, they achieved very impressive 'Agendas'. It also showed that students can perform extremely well when they are given the flexibility and the trust to make their own decisions on certain aspects of their work.

Having formulated aims, objectives, preferred content, and the learning and teaching strategies, one then has to decide on the resources needed for the course. Textbooks and back up books are only one resource. In developing a course that is heavily based on practical approaches to learning there are enormous demands on capitation, for consumables and a wide variety of inputs to create a resource base.

If the course is to be designed as a cohesive unit and with formative assessment for student, teacher and course evaluation then time is important. A framework for this assessment process is shown in fig. 3.

The course needs inputs in terms of visitors, films, up-to-date information, artefacts etc. Again this takes time. Below is an outline of a four-week module but it is worth noting that this involved endless searching around and telephone calls to find key speakers and a range of materials.

Ideally, teachers need to be given the time to plan a course with their departments, if it is to be a cohesive package with an appropriate assessment dimension that is formative and diagnostic,

Geography Module

Aim:

to increase students' awareness of the environment in which they live;
to make students aware of systems and processes and the interdependence of the world in which we live;
to understand the idea of an issue, and that people can hold different views.

There are three broad areas of study within the geography module:

1. introduction to the idea of the environment and issues;
2. introduction to an area of coast, to understand some of the processes;
3. energy-nuclear power.

1. The Environment

In this section you need to explore what the students know about their environment locally, nationally and/or globally.

Teaching strategies:

(a) brainstorming activity with the class or in small groups looking at

THE ENVIRONMENT

what is the environment?
different types of environment?
their worries about the world in which we live
future environments

AND/OR

(b) WHAT IS WRONG WITH OUR ENVIRONMENT; WHAT IS GOOD ABOUT OUR ENVIRONMENT
(c) using the booklet (first section on the environment) you can explore the idea of use and misuse of the environment.

RESOURCES: questionnaire 'You and your environment' as an introduction. Sheets - LOST FOREVER, FRESH AIR, FRIENDS OF THE EARTH material and newspaper articles; two sheets of varying ability (choose as appropriate to your group) 'Environment at Risk'. Either use the ideas in FRAGILE PLANET, p. 2/3 (half-set of books) or (i) get the students to produce a poster to protect the environment, (ii) do a radio play/drama item looking at the environment along the lines of War of the Worlds imagining what would happen if... During this first week the person from Friends of the Earth will be talking to the students.

POSSIBLE HOMEWORKS: any of the sheets could be used as homeworks if not used in class; collecting newspaper items to do with the environment; questionnaires looking at other people's responses to problems in the environment; looking at a local environmental problem. Some of these can obviously extend into week two's homeworks.

2. The coastal environment

Video 'The Changing Coastline'

(a) to look at the interaction of physical and human forces along an area of coast. To set the scene visually for the nuclear power station. Look at processes e.g. longshore drift which obviously is important in the nuclear debate and the idea of waste materials. Use the video interactively to help them understand processes in operation along the coast.
Depending on the interests of the students (and yourself at the end of term) and the amount of time there is, follow work in the Down to Earth series 'Weather, Rocks and Landforms' OR just a simple identification sheet of landforms on the coast bringing out the skills of observation.
KEY WORDS: erosion, deposition, weathering.

(b) If time, 2 sheets use/misuse of the coast looking at how humans use areas of coast to bring us back to the idea of interaction.

Energy – Nuclear power

Brainstorm the idea of what is energy OR look at the use of energy in our homes (this could be homework).

RESOURCES

Endless posters, booklets from the CEGB
4 videos (CEGB) on aspects of nuclear power
Friends of the Earth materials
Down to Earth book 'Fragile Planet' - section on nuclear power pp. 16/17
Sheet on location of nuclear power stations
Sheet on a variety of people who are for and against nuclear power
Role play cards

Depending on your group:

EITHER: guided learning through the use of the Down to Earth book and the sheet on a variety of people and their responses to nuclear power, then to write newspaper report etc.
OR: use checklist system and get the students to work more independently to build up to a role play 'The Beacon Enquiry'.

The role play could be videod!! and used for a discussion/evaluation lesson.

and enables the students to look at their achievements positively. This could also involve peer assessment of work. I am not advocating testing in the form of written tests, but in the form of the students and teachers working together, through a cooperative and negotiating framework. This is in fact favoured by the TVEI, along with the teaching and learning styles suggested in the *The Process Model of Integrated Humanities* by J Breany and D Francis.[12] (See fig. 4). Through the students experiencing their school in this way and being encouraged to ask questions and make decisions they will hopefully

In fact, during Social Studies lesson one can expect to find students:

working in groups or alone on investigative projects;

walking to and fro to the resources bases (possible implication for rooms);

discussing work with peers and/or teachers;

listening in groups or classes to teacher(s)/visitors leading stimulus or concept sessions;

viewing, either in classes or small groups, slides, videos or films;

making models, painting or working on socio drama scenes;

using computers;

making tapes - audio or visual;

mounting work;

working quietly on written work;

using first hand artefacts or facsimilies provided by the museum service;

working outside the building or otherwise making something;

Concept and skills based learning implies that: (J Greany and D Francis)

1. The control of the learning process is held jointly within the relationship of student and teachers;

2. The learning process can best function where the social constraints of streaming and the intellectual constraints of subject boundaries are removed.

3. Motivation should be intrinsic and based on the perceived worth of an activity.

4. Cooperation rather than competitiveness is the order of the day.

5. Individuality and self-expression are highly valued within a cooperative social framework.

Figure 4

transfer this to the wider world, and be more active as global citizens.

Many schools are developing their own INSET programmes which is a positive move, but as schools move over to their own management of finances, is this an area that will continue to be expanded? Finance in terms of classes is dropping; a fellow teacher in another authority has worked out that each student has been allocated two pence a lesson. This then has implications for teaching/learning styles, as it only covers one sheet of A4 and a printed worksheet! Curriculum development in the future will be hampered by lack of resources, as courses will possibly be redesigned around existing materials.

In trying to sort out the range of resources, it requires time, and a

previous knowledge sometimes, to explore the possible pathways. There are many resources that are under-utilised because of teacher ignorance of their existence. Many of the aid agencies now have education officers for areas and offices where materials can be viewed. But with their limited budgets the aid agencies cannot always publicize their usefulness to teachers as a resource. Is it the job of the aid agencies or education to promote their usefulness? In West Sussex the Humanities advisor developed a series of INSET sessions in conjunction with the education officer for OXFAM. But this is only useful to the teachers who attended, and only makes them aware of one agency, though certainly it is a step in the right direction. There are also many other agencies that will help teachers in terms of resources and up to date information. This was particularly apparent in a research project undertaken by The Standing Conference for Education in International Understanding.[14] This is very important for lower school courses and for 'A' levels like the 16-19 School Council Geography Project that are very heavily issues-based and looking at the interdependence of humans and their environment.

'Experts' on various aspects of the curriculum make a useful course input to act as a lead lesson, or a series of lessons. This could be in the school itself, a group of schools within a County or as a conference. There needs to be coordination between schools to facilitate the use of these 'willing people'. This also requires flexibility within the timetable, to allow lessons to be 'missed' if felt desirable to achieve an end.

With the advent of change in our schools through the National Curriculum, the TGAT and Records of Achievement Reports, one can be optimistic and see that the areas of the curriculum that we are concerned about are feasible and possible within the criteria being laid out for teachers. The booklet produced by the DES for teachers, received in schools March 1989, states:

> the aim is a national curriculum that is a framework, not a straitjacket.

Likewise, the National Curriculum Consultative Document of July 1987 (14) called for:

> a school curriculum which will develop the potential of all pupils and equip them for the responsibilities for citizenship and for the challenges of employment in tomorrow's world.

For enthusiasts of global education this could not be achieved without a continuation of development and environmental dimensions within the curriculum.

From an analysis of the Science documents and the proposals made by the Geographical Association Working Party on the National Curriculum, there are areas that are allowing the students

to view the world in a holistic framework and become aware of the need to conserve world resources and recognise the inequalities that exist on a local, national and global scale. From the work of the Geographical Working Party on Testing and Assessment, recommendations have been made that the testing should form an integral part of the teaching process and involve decision making activities, role plays, and not just be standardised tests that can divide teacher and pupil. In the Report of the Records of Achievement National Steering Committee there are encouraging signs in Section 3.34; it states:

> In addition to traditional subjects ... Political education and economic awareness may also be addressed, not necessarily as separate elements, through subjects such as history, geography, English, science and mathematics. Records of achievement should seek to reflect and recognise achievement in these areas, whether separately or through subject assessment.

The debate has also been brought to the forefront through a very stimulating and thought-provoking book entitled 'Greenprints for Changing Schools'. The chapter on the National Curriculum – 'Crisis or Opportunity' should be compulsory reading for all educationalists. In discussing education innovation over the last thirty years and the arrival of the National Curriculum it states:

> are we engaged, as many teachers have expressed, in a deepening crisis in education, or is it a time of unparalled opportunity? According to an ancient Chinese wisdom, the two positions are connected, not contradictory: one's perceptions of the task ahead provides a key.[15]

Conclusion

Hopefully, through the process of curriculum development in schools I have shown the questions that need to be considered. To conclude, in an ideal world, there would be more funding for education for course development, resources and visits/visitors. Teachers would be aware of the possibilities, and there would be active links, or at least an awareness of the usefulness of other institutions, the advisory service, agencies, museum services, government bodies, industry and the various networks in existence at the moment. Linked with these the media would be conscious of the image it is presenting and would not be out to sensationalise, but to help in the education process.

Development and environmental education are important in the school curriculum, not as discrete areas of the school timetable but as cross-curricular projects. It is the responsibility of teachers to make the students aware of the world in which they live and the issues that face them. They need to be able to participate in the 21st century as active and knowledgeable citizens. Our students should be

able to question and ask why; rather than accepting what is presented to them. Time is running out; we need as a society to make people aware that the resources in the world need to be shared more fairly; that the rainforests need to be protected; that we can halt the breakdown of the ozone layer. If we don't then there will not be a future for our children's children!

References

1. Brundtland, G. H. (1987) in Greig, S. et al (eds) *Earthrights: Education as if the Planet really Mattered.* WWF/Kogan Page, London.
2. Lacey, C. (1987) in Lacey, C. and Williams, R. (eds) *Education, Ecology and Development.* WWF/Kogan Page, London.
3. Barnes, R. (1984) 'Teaching about Conflict and War' in *Curriculum Development in Action.* edited by D and J Simkin, Tressel Publications, pp. 108-117.
4. *Earthrights*, p.3.
5. *Geography* **70** (4), Oct. 1985.
6. *Global Teacher, Global Learner.*
7. *Family History*, Tressell Publications.
8. *Into the Unknown*, Tressell Publications.
9. Conference is documented in *Curriculum Development in Action*, pp. 108-129 (op. cit.).
10. Driscol, K. (1986) *Humanities Curriculum Guidelines for Middle and Secondary Schools.* Falmer Press, p. 8.
11. Ibid, p. 132.
12. Greany, J. and Francis, D., in Holly, D. (ed) *Hanism in Adversity.* Falmer Press, pp. 53-62.
13. The Standing Conference for Education in International Understanding have a research project being undertaken by Roy Williams and Stephen Sterling to look at resources etc. for EIU.
14. DES Welsh Office - *The National Curriculum 5-16: A Consultative Document*, July 1987, p. 2, para. 4.
15. Greig, S., Pike, G. and Selby, D. (1989) *Greenprints: for changing schools.* WWF/Kogan Page, London. p. 158.

Chapter 10

BROADCASTING AND WORLD STUDIES - CONTRADICTIONS IN THE SYSTEM?

Paul Gerhardt

1. Introduction and Commentary

At first glance there may appear to be few problems in the presentation of environment and development issues on television. In 1987 more hours were devoted to these critical issues than ever before. According to 'EYE TV', the special promotion sheet published by Independent Television, ITV and Channel 4 showed a total of 90 hours of programming directly on environmental concerns. 35 per cent of these, including such major series as *Earth* (Thames), *Viewpoint '87* (Central) and *Battle for the Planet* (International Broadcasting Trust for C4), were devoted to the global, rather than the domestic, dimension. And the BBC output was additional to this, including the major analytical series *Only One Earth.*

A relatively unnoticed corner of this growing output has been the introduction of World Studies into the Schools TV schedule. The beginning has been impressive, with Yorkshire TV and Thames TV providing an all year strand covering development, food, health, environment, women and debt issues. BBC Schools, in association with IBT, has made a further contribution with a new series on interdependence (*Links*). But these developments are now at risk. World Studies has not found a secure place in the new National Curriculum, which is increasingly determining the content of TV programmes for schools. Furthermore, forthcoming deregulation is likely to push schools TV into night time transmission, ensuring that only teachers committed to World Studies will take the trouble to video the programme in advance.

Clearly the inspiration for the output in 1987-88 was the conjunction of the European Year of the Environment with the final report of the World Commission on Environment and Development. Major series of this kind are years in the making, and producers often need to justify their project by hanging on the 'peg' of an officially inspired

event. But of course the risk behind this surge of output is that future proposals will be met with the cry. 'It's already been done!'. With the honourable exception of Channel 4's continuing commitment to the sharp presentation of international environmental issues, there is little in the pipeline today for future transmission on primetime television.

2. Social Dimensions of Coverage

It is a conventional wisdom that these are 'worthy' programmes, disliked by viewers but demanded by the regulators of ITV and the BBC. However this view was effectively undermined in a piece of audience research carried out by Peter Meneer of the BBC for the November 1987 One World Broadcasting Trust Conference. The 'appetite' for TV programmes about developing countries was tested in this BBC/Gallup poll by asking the sample if there were too many (13%), about the right number (47%) or not enough (28%). 12% expressed no view. There was a clear majority for the existing diet or an increased one.

The figures also showed that programmes on development do not necessarily lose viewers. They have precisely the same audience sizes as other documentary or current affairs programmes in the same slot. And the audience appreciation figures usually reveal a greater appreciation of these programmes. Viewers also opted for more coverage of the 'development issues' concerning the Third World (health, trade, etc.) and less coverage for the current affairs dimension (political situations, war and conflict). Overall, however, interest in the Third World was highest amongst the 15% of the population who have benefitted from higher education. There was relatively higher interest, too, amongst men and the under-45's.

Nevertheless, despite the receptiveness of viewers for programmes in international environmental and development issues, programme planners remain very cautious. They have not accepted the case for sustained coverage on the grounds that audiences would quickly tire of in-depth international analysis. A number of proposals for a 'Third World' magazine programme have been made to the BBC and Channel 4, but, to date, none have been successful. The result is that it has been difficult to establish an interaction with the audience, an interaction which would enable educators to establish a two-way dialogue between broadcasters and those who use broadcasting as an aid to learning.

The further problem is also quantitative: the lack of resources for creative or innovative programming, and the competition to find airtime. Overseas filming has not escaped the trimming of programme budgets throughout the broadcasting sector, and if it is for an educational project the budget will be set at a fraction of the cost

of a prestige drama or entertainment. On Channel 4, and on ITV, environmental programming has often come under the category of educational broadcasting. Educational TV can often only commend 50% of the budget, or even less, of a major peak time documentary. In ITV these 'tariffs', for different kinds of programming, establish the price at which the fifteen companies buy and sell each other's product. Also, the pressures on available transmission time for only four channels provides another rationale for rejecting such projects at the commissioning stage. Ironically, the explosion of channels with coming deregulation will also have the effect of restricting outlets - a point which is covered below.

Another group of difficulties relates to the apparent inability of broadcasting to provide *critical* environmental education. It is a familiar criticism of television that it adopts an authoritative tone, one that discourages a questioning relationship. Many programmes tackling fundamental environmental issues have reinforced this attitude by using as commentators or as presenters 'authority figures' from the environment/scientific worlds. The result is that ordinary, non-expert views, are discounted in effect, if not necessarily in principle.

At the same time, television's presentation of critical global issues has usually fallen short of developing social policy or social action. It seems that, however committed the analysis, television's role must be restricted to the imparting of views and information on such issues as world poverty, debt and ecological crisis, but it must not utilise its considerable influence in the creation of an active lobby to deal with these problems. It can be argued that such caution results from the requirement for balance and 'objectivity' which constrains the broadcast media quite differently from the campaigning press. This internal discipline is today matched by increasing external political pressure on TV news and current affairs - a pressure which may be having the effect of reinforcing self-censorship. But it should be pointed out that where social action is limited to charitable fund raising (*Live Aid*) or to government funded and coordinated health campaigning (*Aids*), then the medium's latent power to mobilise and organise is given full encouragement.

It is sometimes argued that this is a technical problem for broadcasting, that it cannot develop the interactive relationship with users that the new 'narrowcasting' technologies such as cable will be able to introduce. But whether or not we share the view that this is true for the process of *consumption* of television, it is certainly the case that interactivity with users/viewers in the process of *production* has scarcely even been considered. In the protection of the skills involved in programme making many professionals in the industry have also protected from the public gaze the decision-making process itself.

In the case of environmental programming, this means that producers have seen environmentalists and their organisations as 'resources' to be called upon, and not yet as partners in the production process. This distancing also often applies to educationalists, even to those for whom the programme has been designed as a resource for environmental education. It is a familiar lament from educationalists that they only hear of such productions *after* transmission, or, if they do spot them in the week before, they are not able to legally copy them off air.

The final group of problems relates to the shadow cast by world inequalities on to the broadcasting system itself. Rich and poor, the powerful and powerless, are polarities reflected in the relationships between the *subjects* of environmental/development films and the Western film crew. They are also reflected in the relationship between broadcasting systems in poor countries and broadcasting systems in rich countries. Broadly speaking, programmes are made in the developed world, and consumed in both rich and poor societies. Broadcasting systems in poor countries have virtually no resources for programme production and very little for programme purchase. They become very dependent upon cheap series supplied by the major US companies. This means that the familiar notion of a co-production, where two or more broadcasters share the costs of a production, is out of the question for almost all broadcasting organisations in the developing world.

3. Battle for the Planet

Battle for the Planet was an attempt to overcome many of the problems noted above. In terms of *content* it focused on the concept of sustainable development, not as a ready made 'solution' but as the necessary consequence of a clash between the struggle to protect the environment and the struggle to supply human needs. Its *methodology* depended upon the friction between these viewpoints, and in educational terms it attempted a mobilising role which went beyond charity fund raising or simply informative programming. Its *structure* sought to forge a partnership between programme makers from different countries which was not dependent upon access to broadcasting resources. *Battle for the Planet* was commissioned by Channel 4 from the International Broadcasting Trust. As conceived by series editor Andre Singer, each of the seven programmes in the series - tackling urbanisation, air pollution, re-afforestation, sea pollution, desertification, population and food aid - was structured to stimulate an audience response.

Each programme began with an introduction by the presenter, Jonathon Porritt, and was then followed by a *personal* half hour film by a particular advocate. In the case of food aid, Ghanaian biologist,

Edward Ayensu, took the viewer to Senegal to expound his view that food aid policies depress local agricultural production. In *Greening the Land*, on reafforestation, Indian environmentalist, Anil Agarwal, examined the impact of tree planting schemes both in his own country and also in the Sudan. The effect was to ensure that the advocate had to prove the relevance of his/her arguments to more than one context, to globalise his/her case.

The half hour film was then subjected to argument and debate by two very different groups. First, the responses of a working group (of farmers, aid workers, etc.) in a *third* country was recorded - thus internationalising the debate still further - and then the completed film plus response was shown to a working group in the UK. The recording of *their* reactions helped to ensure that the overall issue was seen as relevant to our own society.

In the case of *Greening the Land* Anil put the proposition that "Reafforestation in the Third World is doomed to fail without community control". This view was debated by groups in China, Sweden and Wales. Finally, it was put to the viewer: did they agree or disagree with Anil's argument? Viewers could respond in three ways. They were able to phone a special telephone number to register a 'Yes' or a 'no' vote. They could fill in a 'voting slip' carried each week by the *Sunday Mirror*, or another 'voting slip' in the special accompanying newspaper: *The Planet* (250,000 copies were distributed in the three weeks before the beginning of the series in September this year).

The International Broadcasting Trust was looking for more than a 'response', it wanted to encourage an active engagement with the issues. This was where IBT's network of member organisations, over seventy in number, became crucial. They, together with local contacts throughout the UK, organised public meetings, courses and campaigning events to accompany the programmes. Most of these were advertised in *The Planet*.

Both the immediate response and the longer replies to the issues were passed on to the World Commission on Environment and Development, which was preparing its submission to the UN General Assembly. In this way IBT and Channel 4 were encouraging the use of the medium as a forum for the development of social policy, rather than simply as a mode of communication. Many viewers were keen to take part in that forum. Over 60,000 people accepted the invitation to respond over the whole series.

The international co-production was achieved through an exchange of resources. Western broadcasting systems in the UK, Sweden and Canada found cash. India and China and others provided film crews, facilities and studios. They also took the rights to show the series in whatever format was appropriate locally. This was by no means an equal partnership, but it was more than a token gesture in the direction of a fairer production relationship.

IBT's *Battle for the Planet* was an experiment in a new kind of environmental broadcasting. In the words of its presenter, Jonathon Porritt, it was the first series to 'understand the danger that TV might actually worsen the alienation between people and the environment, rather than improve things.' It showed that participation, by the subject and the viewer, could become a reality in broadcasting.

4. Government Policy and Future Challenges

But the changes blowing through the television sector in the UK will not make the repeat of such experiments as *Battle for the Planet* an easy task. The recent British Government's White Paper, on Broadcasting in the '90s', contains a set of proposals which will accelerate the commercial pressures already applying to television. Instead of protecting the quality of the output and securing the funding base of the existing four channels, the White Paper proposes a system which opens them up to fierce commercial competition.

This will happen in a number of ways. The BBC has been warned that, although it need not accept advertising, the days of reliance on the Licence Fee are running out. The Corporation, whose charter is up for renewal in 1996, has been told to seek programme sponsorship and set up a subscription service. Channel 4, hitherto protected through its complementary relationship with ITV, will in the future have to sell its own advertising, raise its own revenue, and compete with the other commercial services. The brunt of the changes fall on ITV. It will no longer be required to produce 'minority' programming, including education and documentaries. (It should be noted that 'minority' programming in broadcasting terms can be a programme which reaches 3–4 million viewers). Furthermore, ITV companies will be forced to bid for their franchises in an auction which will bleed the companies dry of programme making revenue. Finally, both ITV and Channel 4 will be in competition with a completely deregulated set of new channels, both terrestrial and satellite. The overall direction of the competition will inevitably have to be downmarket, with cheaper programming.

The future of a critical environment education through broadcasting depends, ultimately, upon the future of educational broadcasting itself. The trend is to see all educational broadcasting as a sub-species of the Open University, a form of 'closed' programming identifiable only by the motivated and the aware. But the real potential is to use broad - rather than narrow - casting as a vehicle for reaching new viewers with new ideas. That is why it is essential that educational television remains part of the schedules of the mass audience channels, BBC and ITV.

Environmental educators can no longer afford to wait for the broadcasting industry to identify and reflect their needs. The

'deregulation' of television should be used as an opportunity for new forms of production and new organisational approaches to achieving an interaction between producer and viewer.

Chapter 11

TEACHING AND LEARNING WITH MEDIA

Maurice Plaskow

It's what people do with technology that determines the quality of the outcome. There's a critical difference between healthy scepticism and prejudiced hostility: attitudes are of the essence in adapting to change. Radio has been around for over sixty years; television for thirty. Neither is still a natural part of most teachers' repertoire. The puritan tradition dies hard, as does the tendency to teach as we were taught. The apologetic early explanation that radio for schools was a 'memorable interruption' lingers in an age when in the daily lives of children most radio and TV neither interrupt nor are memorable (although it is significant that what remains in most memories are the advertisements).

Many children and adults still make little use of books, either for gaining information or pleasure. They are the most readily accessible source of information, but it helps to know the way around indexing systems. Some schools provide 'study skills' programmes, but higher education often complains that students don't know how to interrogate sources effectively and martial evidence coherently. Yet quite young (infant age) children develop confidence in handling audio-visual equipment, including computers, and use them for pleasure, stimulus, instruction or composing. They are growing up in a technological environment which is different not just in degree, but in kind from that which was familiar to their parents - and most teachers. It is possible for there to be resource systems which would allow teachers to dial for a range of audio-visual sources to be piped into classrooms when needed. But they don't exist in schools. For the past twenty years libraries have - in some cases reluctantly - accepted that they must provide non-book materials. This includes pictures as well as periodicals, audio and video tapes, computer programs, as well as more familiar slides and records and films.

With the creation of a new breed of resource consultant - the media resources officer (albeit mainly in London) some schools have

the mechanism for systematically incorporating non-book material into their teaching. There is a long way to go before all schools are sufficiently well equipped to make serious and integrated use of all the technologies (although the City Technology Colleges might provide interesting models, at considerable expense).

This is not to deny that much good, highly skilled teaching takes place using traditional methods, or that students learn many things successfully in these ways. It is to suggest that at least some of the learning experience would be more interesting, exciting and engaging if a wider range of media was employed, both for making the curriculum accessible and responding to it other than through the written word. With teachers facing an unprecedented barrage of new initiatives, their understanding might be appreciably enhanced if they could gain insights into these activities through well-crafted videos, as well as through printed leaflets or 'expert' lectures. Schools are going to have to cope with the National Curriculum and Attainment Targets, financial management, appraisal, records of achievement, as well as the groups of initials which have not only to be understood, but reconciled: GCSE, TVEI, CPVE.

Teacher training has scarcely begun to exploit the use of television as a medium for capturing experience, not as a series of snapshots, but as unfolding development to be used for analysis, review and reflection. It is not all that difficult to observe classroom practice through video, and show the interaction of teachers and students in ways which retain integrity and authenticity. No evidence is as compelling as seeing work in progress in credible circumstances with open testimony from the teachers and students involved.

This kind of material, even used sparingly, provides evidence for study, not necessarily models to emulate, nor examples on which to make judgements. And modern equipment is sufficiently robust and inexpensive to allow students to compose responses to their set tasks, to reconstruct their learning, or create new meanings for themselves which can be presented not only to teachers but to colleagues and other audiences. To accept that video is a convivial tool for learning is to recognise that sound and vision predate language, and are flexible: like teaching itself they are provisional and essentially experimental. In the way that word processors have come to transform the composing process, video liberates students from the tyranny of the essay, while imposing its own demanding discipline in terms of articulation, construction and coherence. Teachers need a framework within which to gain self-critical control over their work. The great difficulty is that the product is elusive and the process constantly changing. There is no single model of 'best practice.'

There is always a range of strategies from which teachers can choose, related to the needs of the learners, their preferred modes of

learning and the nature of the task. Many teachers have enthusiastically accepted, for example, that role play and simulation can be an effective stimulus to motivate students, and to help their understanding of difficult issues. They have also come to terms with the computer, since its applications are so obviously powerful and pervasive, and computers are central to data storage and retrieval as well as large areas of problem solving. With television there is still a cultural dilemma. It is seen as essentially an entertainment medium, and a tool for commercial exploitation, a view no doubt reinforced with the coming of satellite broadcasting. But it is also a prime source of apparently authoritative information. The technical complexity and expense of broadcast television do not invite participation, and the domestic use of video is overwhelmingly to aid flexible viewing, not analytical reviewing. In making INSET material it is therefore difficult to change expectations. We do not have the habit of watching short sections of video as a trigger for discussion, or as a means of analysing behaviour. Few of us would have any qualms about reading a single chapter of a book at a sitting, or going back over a section in order to clarify our thoughts about it. It is possible, and often desirable to do this with video. We have the advantage that it is possible to watch and listen, and therefore to take in the non-verbal cues as well as what is said. We can look at organisation and methods, examine interactions and assess outcomes against intentions. And there is the added advantage of the shared experience of video, when teachers can view the same material together and compare their perceptions of what they have seen and heard, and come to realise how selectively we look and listen, and how much we bring to the events our preconceptions and prejudices. There aren't all that many opportunities for revealing openly and examining honestly basic assumptions as distinct from surface rhetoric. Video allows a distancing of the personal to the neutral context of the screen, and the discussion of that, instead of anecdote as evidence.

Increasingly teachers will be responsible for the management of their own professional development. As Lawrence Stenhouse (1975) pointed out 'there can be no curriculum development without teacher development'.[1] There has probably never been a time of such turbulence and change all jostling and coinciding. If schools are to achieve stability and coherence along with change, there will need to be a consensus about aims and values, about the curriculum framework as well as its content. Teachers need to feel comfortable with their pedagogy, and a sense of ownership and direction of their tasks. Just as many schools have introduced personal and social education programmes for their students, so they should be thinking in similar terms about their staff. If these are effective learning processes, then they should work equally well with adults.

When it comes to the use of media with students there are other confusions. The first is that use of media is not the same as media studies, although the two activities may be complementary and mutually enhancing. Media Studies has become an examination 'subject'. The course may be more theoretical than practical, looking at both the form and content of the mass media. Developing the skills of using media is a process, which is not located in a single curriculum subject.

The other main blockage is the academic view that learning must proceed sequentially, by a process of logical thought, through analysis, synthesis and abstraction[2]. This is to deny the force of feeling and the imagination, which is an inseparable component of thought. In Louis Arnaud Reid's striking phrase: 'feeling is part of the whole of waking consciousness.'

Using the 'languages' of sound and vision requires the exercise of the imagination and the skills of 'imaging'. Of course the production of a programme will call for organisation and structure, for design and shaping in the cause of communication. But there is a lot else besides. There will, as with any design task, be the collection and sorting of data. But the sources will be more diverse than in the case, say, of an essay, since one will be investigating visual and aural evidence, and transferring material from one medium to another. The creation of an audio-visual programme normally requires cooperation, and the development of social skills: a readiness to listen and negotiate, to tolerate rejection, and submerge personal preference in the face of compelling argument. There is also the ordering of different means of expression, the linking of words and pictures, the management of movement and possibly of music.

The interim report of the National Curriculum Design and Technology Working Group[3] gave a general definition of the design activity as 'the capability to operate effectively and creatively in the made world.' It went on to describe it as a visionary activity, a mode of thought which is non-verbal, and is concerned with what might be. It is always purposeful, and depends upon value judgements at almost every stage. The creation of an audiovisual programme of any kind is a design task. These characteristics make design, in this definition, particularly appropriate as a curriculum tool. The range of skills is not subject specific, and although there will be the inevitable constraints of context, the scope for interpretation and variety will be infinite. There are no single 'right' answers: there is a range of resolutions. At a time of rapid change and uncertainty it is, therefore, a more relevant process in which to induct students than an instructional mode which creates an illusion of certainty bordering on dogma. It does not require great forecasting skill to be able to speculate about future possibilities for flexible learning. The development of interactive video combined with computer programs will

enormously enhance self-directed study which can take place in a variety of places, including the home. The role of schools as custodial institutions can be greatly relaxed, as students are able to negotiate their tasks and enter into 'learning contracts' which will be related to modular programmes and credit accumulation. The technology is available, but it must not drive the activity. The challenge facing teachers is to design a 21st century pedagogy which is relevant and worthwhile, and which is perceived by students as motivating and tuned to their needs. As long as this is seen as an exciting opportunity, it could transform the rigid traditional structure of formal schooling, into a process of continuing education which has no end point, but is achievement led rather than diploma dominated. Veni, video, vinci ...

References

1. Stenhouse, L. (1975) *An Introduction to Curriculum Research and Development*. Heinemann Education, London.
2. Lorac, C. and Weiss, M. (1981) *Communication and Social Skills*. Wheaton, Exeter.
3. National Curriculum Design and Technology Working Group 1988, D02S.

Chapter 12

THE QUALITY OF PRIMARY EDUCATION IN DEVELOPING COUNTRIES: FROM CRITIQUE TO POSSIBILITY*

David Stephens

Introduction: the good news and the bad news

First the good news. Ngingyang Primary School, several miles beyond the tarmac road that takes tourists to Kenya's plush Lake Baringo Club, has a new teacher. His name is Yusuf Losute; he is about nineteen, has just completed his secondary education (not quite enough GCE 'O' level passes to get into the sixth form), is a member of the Pokot ethnic group who live around Baringo, and he's doing very well indeed.

On a recent visit I found him and his class - just a handful of boys as the elder Pokot are yet to be convinced of Western-style schooling and anyway the lack of rains has driven them further and further in search of good land - working through an elementary mathematics problem on an easel propped up against a tree in the school compound.

With three classes and two classrooms it seemed the best arrangement. Yusuf likes teaching, though he still has a yearning for college and a career in forestry. He, like many others, is learning by experience. As a Pokot it comes naturally.

The bad news: more than one child in every ten born in Yusuf's village will die before they reach school age ('one death in every three in the world is the death of a child under five'[1]).

Many of those who start his school will never finish and many who finish will enter a world where they can find little security of mind, where paid work will be difficult to find yet where traditional farming and herding duties will no longer satisfy; where the culture of the old and young will be increasingly at variance; where traditional values are questioned yet where new values prove hard to define ... a wide, restless exciting world where it is easy to lose one's Pokot identity.

We might begin by asking the question 'are things getting "better" or "worse" for Yusuf's children?'. In terms of their survival rate, certainly better. The director of UNICEF can report:

> ... despite the difficult economic climate, the limited promotion of new low-cost means of protecting children's lives and growth is already resulting in the saving of nearly 40,000 young lives each week. (ibid)

So is Yusuf's school 'a new low-cost means of protecting children's lives' and promoting their growth? Will it improve the quality of its children's lives by helping them, now and in the future, to fit into a changing world? Will what is good and just and productive and happy in Pokot society be threatened or enhanced by it? Finally, will it have the minimum resources in money, personnel and time, to do an honest job for the children who attend it?

The purpose of this chapter is three-fold: first to place development questions like these in their larger, economic context and to examine the relationship between planned change and primary schooling. Secondly, to provide a critique of what we mean by 'quality education' and strategies for achieving it and, thirdly to re-examine commitments - intellectual, economic and moral - required to resource such endeavours.

The climate of debate and the management of planned change

Let us stay with Kenya for a moment and look at some startling demographic and economic indicators. Kenya's population is estimated to be expanding at 4.1% per annum. Life expectancy has increased from 42 years in 1960 to 55 in 1986. Under five years of age mortality rate has plummetted from 208 per 1,000 born alive in 1960 to 118 in 1986. More children are therefore surviving into school age and so more children will need to be fed, clothed and provided for. Let us not forget, too, that the GNP per capita (US dollars) for Kenya is currently arround 190 with the United States, itself, standing at approximately 16,690[2]. Likewise, of course, we must remember that there are many driving to work in Nairobi whose lives are different from the average Pokot.

Yet if, economically, life is becoming more difficult for the world's poor, it seems that in the social, health and education spheres, in numerical terms at least, progress is being made. UNICEF estimates that by 1990 33,000 more children will be surviving each day[3]. Far more children too are going to school. While it is dangerous to think of increases in percentage enrolments as synonymous with educational improvement, there is no doubt that more young children achieve minimum literacy and numeracy than in the past.

A major economic and educational reality is therefore the

relationship between demographic change and schooling. Nations heavily involved in the economic recession are the very nations with high percentages of their populations under the age of five. Indonesia, for example, suffering from a fall in oil prices, has a population of 169 million. A third of them are under the age of 16. In Nepal, just under half the population are of school age. Lesotho is in a similar position, though distorted by the huge number of young men and boys leaving for work in South Africa's gold mines.

Progress in health and efforts to re-prioritise scarce economic resources mean that the pressures upon the primary school sector will increase. In spite of the problems of school-leaver unemployment and the poor quality of education provided in many schools, parents in the less developed world, at least, still view schooling as a worthwhile economic investment, as indeed it is for some ... and 'some' in the eyes of every parent tends to include 'my child'. Such economic expectations are reinforced by social pressures. Gone are the days when 'my child' can be illiterate and unstigmatised.

But today educationists, however well they understand individual hopes and aspirations of parents, are far less convinced of the general economic investment potential of schooling. This view is in sharp contrast to that held at the start of the 1960s and the optimism and enthusiasm for 'making schools' the engine of development.

Today the language is of 'debt', 'recession' and 'austerity'. The economic language of post-Independence was very different: then we read of Rostow's optimistic 'stages' of economic development. Economies were expected eventually to 'take off' like jet liners and modernisation theorists led the day. In the intervening quarter century we seem to have thought more deeply about the concept of development and realised the inappropriateness of working around simplistic notions developed in industrialised nations and cheerfully exported, like some consumer goods, to developing ones.

It is now questioned whether industrialisation and incorporation into the international capitalist system are necessarily desirable goals for the majority of those living in less developed countries[4]. Industrialisation may provide high incomes for some; but seems also to increase the gap between the rich and poor; between those in the urban areas and those in the subsistence, rural sector. In many ways, industrialisation can lead to a process of underdevelopment and problems of competition with Northern, established industrial states, who keep control of commodity prices and tariff barriers.

If development economics has changed, so have perspectives on schooling. Whereas the 60s saw the flourishing of human capital theories with economists looking to education to provide a profitable 'rate of return', it is now recognised not only that the link between more schooling and improved economic production is unproved but also that the process and institutionalisation of schooling is itself an

expensive business. Thus concerned politicians and educationists, convinced of the demand for education, yet appalled by its costs and sceptical of its output, now seek to take a look at the *process* of schooling and to see, frankly, whether more can be done with less.

As nations, like Kenya, have struggled to come to terms with political instability, large-scale unemployment, the rural-urban population drift, high drop-out rates from the education system, and reinforced social stratification; the focus has imperceptibly shifted from the quantity of schooling provided to the *quality* of that provision. Even the definition of schooling is beginning to be examined, as are the rigid distinctions between formal and non-formal education[5], though a great gap still exists between talking about these issues and resultant action.

The management of planned change

Dynamic change is now a way of life for all of us. When we talk of change now we need to discard the somewhat naive notions of 'take off' and 'modernisation' and look instead to adjusting to economic realities so that:

> ... maximum protection for the most vulnerable (can) be squeezed from every dollar available for health care, education or social welfare.[6]

Management in these circumstances is concerned with two fundamentals: realignments of priorities within the development programmes and more effective control over the management of those programmes.

If change is no longer seen as linear or simple, equally many are questioning the old *mechanistic* view of development: the input/output systems approach to change which seemed to imply that development was really only measured by end-product achievement of behavioural objectives. More students were leaving school with higher examination passes; therefore schooling was working. The flaw in the reasoning is that, first, greater weight is given to that which is easily *measured*, ie examination grades; and secondly, that little regard is accorded the time spent between changing from an input to an output.

Given that, for many people, schooling can account for almost a third of their life span, it seems reasonable to assess the *quality* of that experience; and in particular the management of that time. Perhaps we should begin, though, by looking more closely at what we mean by 'quality education' and by examining processes of critique and action needed to achieve it.

Quality education: the language of critique; the language of possibility

In a nutshell 'quality education' is:

meeting individual and community needs 'now' and 'later';

laying a foundation for lifelong learning and in-building within the process of schooling 'learning for change';

providing breadth of educational experience that is rooted in direct experience;

providing depth of learning that carries learners forward into a future where new competencies and abilities will be called for;

taking into account that children in school have the right to exercise choice, enjoy respect and enjoy their work in exactly the same way as any other citizens.

I am proposing, therefore, that education be managed and changed at the same time. In short, for one eye to be fixed, upon adult life at the end of schooling and for education to inculcate skills and abilities related to the changing economic realities; and one eye to be kept firmly focused upon the conditions of schools, the quality of society in those schools, the quality of the curriculum; and concomitant strategies to improve as we go along. The achievement of any of these objectives requires an understanding of the *process of change*. This process can be seen as consisting of three basic ingredients: choice, decision-making and power to implement decisions taken; operating in two distinct, though interrelated stages.

First, the stage of *critique* - in which reflection, understanding and consideration provided the vocabulary or what Paulo Freire[7] calls the 'language' of the initial part of the change process. Secondly, the stage of *possibility*, in which change is interpreted in terms of hope, involvement and responsibility. In sum, quality decision-making, therefore, is about two stages of a process: a critical understanding of the present situation followed by effective action for change.

Let us apply this paradigm to the existing decision-making process, particularly with regard to aiding primary education, and look *critically* at what currently happens and what we might *possibly* be able to do about it.

The language of critique

At each level of the decision-making process, local, regional, national and international, we need to ask: who makes the decisions? And what are the influences that affect those contexts in which decisions are taken?

Because levels of economic resources so critically affect all public policies, it is hardly surprising that, beneath nearly every educational decision-maker of importance lies an economist struggling to assert him/herself. It is no coincidence that one of the largest donor agencies calls itself a 'Bank' (that, in fact, is what it is) and equally unsurprising that the language of economics, eg rates of return, investment, human capital, has so long dominated the educational policy frames of reference.

A problem for economists, particularly, and those who want a neat and tidy accounts sheet, is that quality of education is difficult to measure by an objective rule of thumb (unlike the large quantities of US dollars numbered, balanced and juggled at the end of each fiscal year). What is inherent in our analysis of good education is that it is defined and negotiated and achieved differently in different contexts and that, furthermore, the process of understanding, achieving and monitoring it, is as important as the outcome. The achievement of quality education is an *internal* struggle by the curriculum worker, the supervisor, the teacher and the pupil. External development aid can only facilitate their success by making it easier for them to come to decisions and act upon them. Consequently we may consider certain strategies appropriate to those who provide aid to enhance quality at primary level. Four lines of thought and action appear possible.

1. Investment in clarifying purpose and priorities at local as well as central level

Consider the following example of such a process in action. In 1988 a working seminar was convened in Uganda, sponsored by the Harold Macmillan Trust, to launch a programme for production of locally produced and locally relevant materials for teacher education[8].

The seminar, whose composition included all those nationally responsible for teacher education and curriculum design, recommended that following an appraisal of present conditions in schools and colleges there should be a comprehensive and considered analysis of purpose:

> what development needs should schools serve?
>
> in what areas of experience should primary schools develop capacities to meet such needs?
>
> consequently, what knowledge, skills and attitudes would teachers need to possess and how should training materials be devised to develop these?

The clarification of such purposes will require considerable investment in money and time. It will not come other than as a result of a

considerable period of structured discussion, not by a 'project appraisal team' but exclusively by Ugandans themselves.

2. A widening rather than narrowing of the parameters of aid and assistance

that is, by supporting activities that are working and building upon these rather than confining activities solely to large cumbersome projects and attempts to generalise policy at international conferences. This inevitably means aid funding for smaller initiatives, sometimes non-governmental ones, and it is significant to note that even the World Bank now comtemplates such a change of emphasis.

3. A focus on short-term rather than long-term improvements

The language of debate needs to be less grand and more tied to the achievement of objectives perhaps in the lifetime of one primary school cohort.

4. Maintenance of tighter control of what is actually happening on the ground during the process of change –

with increased flexibility built into the management process to modify approaches in the light of experience. Much time and effort is spent upon summative evaluation of aid projects with scant regard paid to what happens from the day of signed agreements to design and implementation.

One critical focus for action both for international aid and within countries themselves is to combat the lack of status accorded primary education. This seems manifest in a number of ways:

> decision-makers in all aspects of primary policies are usually lacking any experience of working in the sector so that we can have a bizarre situation where lecturers in education to primary trainees are actually people promoted to the tertiary sector from the secondary;
>
> the attitudes and expectations of those charged with deciding issues pertinent to the primary sector are influenced not by client concerns but by the institutional ethos of the centre institute or university in which they were trained and now work;
>
> the air surrounding the decision-making process becomes rarified and wrapped up in a pseudo-academic jargon which in turn breeds a discipline devoted to deciphering and discussing terminology rather than whether it has been communicated or evaluated *in situ*.

We can see this happening particularly at universities where studies of educational foundations eclipse practice; in curriculum centres where doctrinaire adherence to principles of curriculum development drives out common sense; in colleges and planning units of ministries. What is urgent and vital is to invest in a form of

training which, on the one hand, elevates the status of those well grounded in primary practice and, on the other, makes such practice, and the analysis of it, as academically respectable as the studies of philosophy and sociology. Evidence from attempts to achieve these goals in Indonesia, Lesotho and Kenya indicate that universities at least may well resist such attempts to bring them closer to reality.

The language of possibility

Here I wish to identify five strategies that take us beyond the language of critique and towards the language of the possible and into the realm of action.

1. Towards realism

Here we look to the reappraisal of our critical knowledge of *what is happening* in our primary schools. We look to research institutions to focus their intellectual energies and resources upon illuminating realities. This need not have connotations with 'finding out the worst' but providing teachers like Yusuf with models of good practice, possibilities for making more of what little he has, opportunities for initiative and personal decision-making. If a teacher's centre is to be established, could its resources be taken out to a number of schools on a regular basis? Perhaps 'school clusters' and identified 'resource persons' as operational in Nepal will work elsewhere? Equally, the idea of 'teachers' groups' from Indonesia might work amongst schools in the Lake Baringo region?

Equally, we require opportunities for teachers to meet and to talk through issues and clarify goals and practices. School-focused curriculum development is slowly being recognised as a very effective and realistic way to in-service teachers and as an effective means of helping those responsible for running training workshops to relate much more their theories to practice.

2. Identifying, training, supporting enablers

At every level of support to the primary school teacher we should identify, train and support those called upon to manage the change processes. In particular, we should look to enhancing the leadership capabilities of a key figure in administration: the school head; for by improving and differentiating the roles a head teacher is called upon to perform, the potential for the head to effect qualitative improvement in schools can be increased.

3. Helping to create 'room for manoeuvre'

Creating room for maoeuvre is working not from the position that *is* but adapting surroundings to what *might be*. How often have we

continued to teach a topic that is patently taking us nowhere? Or have thrown away half a textbook for being out-of-date and irrelevant? 'Room for manoeuvre' starts by taking a long, hard and critical look at the way things are; and by asking, often, the most obvious and sensible questions.

It may not only be concerned with over- or under-crowded rooms; it may relate to syllabuses; the curriculum (both usually cluttered with too much mental furniture); the role of the community; or ways in which we test what is taught. Sometimes it is just a change of attitude (how often do we see teachers writing a list of answers on the board and asking students to read 'the passage' for the 'right question'?); sometimes a matter of adapting resources for new uses; sometimes knowledge and exposure to models of good practice.

A way forward is to avoid assuming immediately that the solution to a particular problem always has to come from outside the school (and probably from the Ministry in the form of a local purchasing order). By encouraging initiative from ***all*** those living within the school community it is possible to invoke the twin-sided coin of responsibility and accountability. I am not suggesting that this ability to expand 'room for manoeuvre' like teachers of old, is 'God given'. As professionals, we can take a leaf out of the business community and see that 'opportunities to open up the market' (in this case, the 'learning market') can be acquired through pre- and in-service training and support.

Lastly, we are assuming that those in positions of responsibility in the bureaucracy will support those at local level who create such room for manoeuvre. Unfortunately, such support is often witheld. In Bombay[9], for example, there is no prospect of children from slum backgrounds covering the official syllabus. Those responsible for their improvement well recognise this fact and have devised an alternative programme which, by ensuring that children master fundamentals of reading, enables them to 'catch up' with the official syllabus by the end of Class 3. They asked for such 'room for manoeuvre'. They were denied. Children in Class 1 now have little chance of success. Such an attitude on the part of the bureaucracy was misjudged and uninformed. The decision-makers were almost certainly innocent of any knowledge of the primary syllabus, but cynics might easily note that these slum children came from communities without power or influence ... so who cared about them?

4. Moving the goal posts

Finally I emphasise the importance of taking a long hard look at established educational practice in the light of current needs and realities. In ministries, in colleges, in universities, in schools, as well as among those who finance and aid education, is it not time that we sat

together to examine some of the 'goal posts' we aim at? It could be that we may find them ill-sited. So much of our education is a result of received mythology that does not stand up to scrutiny. Let us consider some of it under certain convenient categories.

4.1 The planning and management of education

Received wisdom

There are planners, administrators, advisors, head teachers. Their roles are different, some are administrative, some professional.

Common sense

But they aren't ...

There is a massive degree of overlap. Every administrator needs to be aware of professional priorities and every professional of administrative constraints. Training and job descriptions should reflect this. Otherwise quality suffers.

4.2 The organisation and management of the teaching force

Received wisdom

Teachers must be well educated and trained first. Those who are suitably qualified may need a little 'refreshment' during their career but generally in-service provision needs to be given to the unqualified.

Common sense

The training teachers received ten to fifteen years ago isn't much good to them now. The context and content of what they teach has changed out of all recognition. Besides much of the theory they learnt in college never made much sense as they had no experience to hang it on. Perhaps shorter initial training and greater investment in training on the job would make more sense. If teachers are out of date and disillusioned, quality of education suffers.

4.3 The process of training and monitoring teachers

Received wisdom

The basis of all good teaching is good lesson preparation. All lessons should be carefully prepared with objectives and stepwise content followed by an activity.

Common sense

Good serving teachers seldom prepare this way. They can't. There isn't time. Besides they have no idea how much the children will be able to grasp. Often their introduction involves merely taking off from 'where we go to' last time. To serve quality, better work surely needs to be planned as units of teaching and learning and not as individual lessons.

4.4 The curriculum

Received wisdom

The National Curriculum is planned centrally and contains content

which needs to be covered by all primary schools so that all will get a fair chance.

Common sense

While every child in a nation needs to attain certain minimum skills and competencies in primary school, it is unrealistic to imagine that they can or should master the same content. Content *must* be linked with individual interests and abilities and with social and cultural contexts. That is why room to manoeuvre at the level of school curriculum planning is so important. If a single detailed content is planned, inevitably it will reflect the needs of the children of those who drafted it ... almost invariably middle class town dwellers. Their children may well receive content of quality. Others will 'drown'.

4.5 Methods of teaching

Received wisdom

In large classes and with poorly trained teachers, teacher centred class teaching is the only effective option. We need to concentrate on making such teaching effective.

Common sense

Such teaching is probably easier on the teacher's nerves and possibly cheaper, but it is certainly not the only effective option. Poorly trained teachers in adult education don't teach that way, neither do parents. Traditionally in most cultures there are many examples both of learning by doing and of peer groups helping each other. If children can read and materials are available, they can teach themselves and each other. Many do so already. Quality will vastly benefit from more thought and action towards such alternative methods of teaching and learning.

4.6 Assessment and evaluation

Received wisdom

These are separate activities and both are done by specialists in the field.

Common Sense

The two activities are closely linked. We need to start to use the results of assessment to illustrate issues of evaluation, of policies, practices and possibilities and to train and support teachers both to take part in evaluation and by improving their own expertise in assessment to recapture some of the ground lost to distant examination bodies.

5. 'Risking something more'

As much of the quality involves such things as efficiency and relevance so it also relies upon teachers and others doing that 'something more' (as many unsung heroes already do) for no extra financial reward but because it is rewarding in terms of satisfaction.

One wonders sometimes whether some, albeit hard-pressed, educationists, actually *like* teaching or have even stopped to consider whether they enjoy the company of children? Empathy and a love of what one does can only come though, when teachers believe they, in turn, are loved and respected members of the community.

Educational priorities: intellectual, economic and moral commitments

To bring about the sort of changes we have been talking about in terms of critique and action requires intellectual, economic and moral resourcing. On an *intellectual* level, a need has emerged for a broadening and deepening of research into primary quality. Looking through libraries for material on education and development, there is a marked lack of useful data on such issues as: impact on language policies at primary school level including such vital problems as whether children in primary school can actually comprehend their textbooks; the training of primary teachers in relation to their needs in the field; of analyses examining the use and non-use of syllabuses and textbooks. Much more classroom-based research needs to be done by university researchers; and equally much more of the research that is done needs to be taken up by publishers. We have very little evidence, even now, of what really goes on in classrooms as distinct from what is intended.

Equally, there needs to be a deepening in the type of research done. As already noted, international research seems to have been dominated by an input/output paradigm which is useful in measuring what *it itself* considers important but omits crucial aspects of process by focusing too narrowly.

Finally, we must be concerned about the ways in which such research is presented and communicated. At present what is available, almost all of it from universities, tends to be presented mainly for consumption by other academics full of statistical jargon, 'ibids' and 'op cits'. Thus even if hard-pressed administrators comprehend it, they are hardly motivated to read it. Strangely, too, in an age when we receive most of our day to day information from the spoken word or the visual image, research findings are almost invariably confined to print. Hence another turn around in thinking may be necessary. We may need to ask whether a new approach to the presentation of research is not necessary, an approach which places far more emphasis on the purpose of research in relation to the *audience* for whom it is intended.

On the *economic* level I have throughout this chapter stressed the need for a re-examination of priorities. A recent study of primary education in Cameroon, for example, revealed that, whereas higher education in that country was enjoyed by 0.68% of the school-attending population; it receives 22.5% of the resources allocated to

education generally. These figures could be paralleled in many countries. The fact is that we resource higher education at the expense of primary and lower-secondary levels. Such situation, in practice, means that we deprive higher education of the very people we would like to see there; they having fallen by the wayside way back down the line because of *economic* underfunding of primary education.

But to change the percentage in favour of primary education would do little to improve its quality unless deep thought were given to *where* new resources, necessarily spread thinly because of the size of the primary sector, should be deployed. Here again, a sense of realism must determine resource allocation:

There is *no* prospect of avoiding large teacher/pupil ratios;

There *is* an opportunity for ensuring that children have suitable books to use and materials to write on;

There is *no* prospect of abolishing selection procedures at the end of primary school;

There *are* opportunities to invest in the creation of a selection system whose 'backwash' effect on primary education is largely positive;

There is *no* prospect in most countries of achieving a fully qualified and trained teacher force in primary school;

There *are* opportunities to ensure that all teachers receive effective professional help and support on the job while they are doing it.

Given real thought and commitment, a modest increase in investment in primary education could yield large gains in its quality.

Lastly, there is, surely, need for a *moral* commitment for those who are in powerful positions to remember their own early years at school, to remember that all are not so fortunate as to be able to send their children to a private school in the city and that it is a moral duty of those who plan education to be aware of the realities in which those plans can be implemented. Thus planned change for education needs to be based upon democratic principles.

References

* This chapter is an abridged version of the concluding chapter of the writer's and a co-author's forthcoming book (1990) *Questions of Quality: Primary education and development.* Longman, Harlow, Middlesex.

1. UNICEF (1988) *The State of the World's Children.* UNICEF, New York/ Oxford University Press, p. 5.

2. Ibid.

3. Ibid.

4. Bray, M., Clarke, P. and Stephens, D. (1986) *Education and Society in Africa*. Edward Arnold.

5. As in the vast yet still diffuse literature on Lifelong Education beginning with the report *Learning to Be*, UNESCO, Paris, 1972.

6. UNICEF, op cit, p. 35.

7. See Freire, P. (1985) *The Politics of Education: Culture, Power and Liberation*, Macmillan, 1985 and Giroux, H. (1983) *Theory and Resistance in Education: a pedagogy for the opposition*. Heinemann, London.

8. Report of a Seminar on Teacher Education and Materials Development in Uganda, Harold Macmillan Trust, London, September 1988.

9. Parisar Asha - a private foundation based on St Xavier's Institute of Education and aided both by UNICEF and the Aga Khan Foundation.

CONCLUSIONS

John Abraham and Colin Lacey

The chapters published in this volume illustrate an educational paradigm, summarised in the concepts: deception, demonstration and debate. What is of particular interest to us as sponsors of the seminars and editors of the book, is that the paradigm, which can be seen as an important educational tool, arose particularly from the writing of authors working in television and research, as well as those more formally concerned with education. This seems to us to indicate a convergence in ways of thinking between what are often seen as quite disparate fields, television, research and formal education.

The reasons for this convergence are not difficult to find. People working in the media and some aspects of research have been the first recipients of information about the massive and disturbing changes that are taking place in our environment and which are directly related, often on a global scale, to attempts at development. We now know that dirty, fossil fuel, power generating techniques in India and the destruction of tropical forests in Brazil or the Philippines will have real effects on our environment, just as our unjustified CO_2 emissions will jeopardise the future of other countries. This fundamental realisation of one earth with a common future has emerged at an early stage amongst professionals working in research and television and as a result they have adopted a more specifically 'educational' stance in their work. For many of these people the *need* to change attitudes and behaviour, which has also been a classical education objective, has never before been more apparent. (See Anne Karpf and Robin Jenkins, this volume.)

For concerned professionals within the media, however, the problem of how to proceed is somewhat different from that facing professionals within the education system. Both have to overcome problems relating to 'institutional truth'. Television producers and teachers need to overcome institutional entropy that resists move-

ment away from traditional roles and function, but the constraints are different.

In television in particular the pressure to entertain and stimulate interest is linked to the indicators of audience appeal - ratings. It follows that while demonstrations of deception with respect to the environment remain popular, producers will have the incentive and the freedom to continue to develop public awareness. Most outsiders would agree that they have achieved remarkable success, with levels of public awareness and concern growing in each opinion poll. Programmes of high quality have been produced and convinced many people of the seriousness of our predicament. However, there are problems ahead and it is important to be aware of what they are. Public opinion is fickle and today's star turn could be tomorrow's has been. Structural changes in television, in particular deregulation, are likely to increase rather than decrease these dangers. (See Paul Gerhardt, this volume).

If we refer to our model, we can describe the progress that has been made with respect to public understanding of our global problems as a successful demonstration. We are only just beginning to experience counter demonstrations and many debates are just starting. Some reactions have been predictably polarised. For example, Robert Whelan of the Institute for Economic Affairs compares the greens unfavourably with Islamic Fundamentalists and is quoted as saying 'market forces and human ingenuity will always take care of shortages and provide solutions which will leave us better off than we were before'[1]. Others see the working of market forces as in some measure responsible for the destitution and destruction that already afflicts large parts of the earth. The battle lines are already being drawn up and in the UK, for example, environmental issues are increasingly being defined as party political.

As debates takes place two problems emerge. The first is the maintenance of public interest in the face of disagreement, vacillation and wrangling. The second will be to sustain commitment when difficult decisions are required that affect lifestyles and individual freedom. One of the first and most obvious of these choices could be the balance between the public and private modes of transport - the private motor car. In order to sustain its role as the debate continues, it is clear that television will need to reshape public expectation of its function. It has the opportunity to do this as a major contributor to the democratic quality of our society. The direction in which this reshaping will need to occur is in the form of longer term commitments to topics and concerns, maintaining a high quality of presentation, information and debate and in some respects, therefore, taking a more specifically educational stance.

The problem for the education system arises from its quite different tradition. Its organisation and function have been built

certainty and established bodies of knowledge. The establishment of a National Curriculum can be seen as a reaffirmation of this function as individual teachers and some organisations within education developed concerns and practices that challenged these established certainties. Education has not been concerned with entertainment or even stimulation. Rather its audience has been assured and its functions of instruction and assessment have been far more compelling and serious. (See Annette Beard, this volume). Nevertheless, the challenges of a rapidly changing and deteriorating future should not be, and are not being, ignored. (See Tony Hopkin, this volume.) It is partly as a result of these challenges that the subject discipline framework into which the National Curriculum has been forced is already bulging and cracking under the strain. In addition, subjects are rapidly changing to demonstrate their usefulness to the new concerns about environment and development.

Teachers, and even educators and researchers in higher education, already have the security of long term commitments to subject disciplines. What they now need is the ability to respond rapidly and intelligently to current concerns. It is important that the increasing politicisation of environment and development issues is not used to stifle this response. The 'deception, demonstration and debate' model as a pedagogic device has important advantages at this point. The explicit use of this model within teaching links education to the concepts of public debate and democracy at two levels. The first provides the educator with an important legitimation for tackling controversial environment and development issues. (See Barbara Dinham, this volume.) The appeal to democracy and openness is powerfully ascendant (not least in the dominant Western response to Eastern Europe) and any attempt to advocate these principles in one context but suppress them in another reveals a glaring contradiction. The second level of pedagogic usefulness relates to the model as an analytic tool for individual pupils and students. It provides a way of thinking about some social processes relating to the generation of knowledge which are more appropriate than the accumulation model of knowledge which is overused in schools. In other words it could be relevant to building new understandings and a new intelligence vital to our collective future.

In particular, the notion of a new and more 'collective intelligence' is important because, as individuals, each of us has only partial knowledge. The more complex the subject under consideration, the more this will be true, and so it is virtually a truism with respect to environment and development issues. Hence, insofar as individual educators attempt to raise awareness about problems of development and the environment they necessarily face the difficulty of partial knowledge and its concomitant uncertainties. However, the partiality of knowledge to which educators have access is not a

random process, rather it is determined by social relations and social structures. A key problem facing environment and development educators is that the extent of the partiality of knowledge in the educational sphere is defined by certain social structures through suppression of information. In the United Kingdom, for example, the Official Secrets Act can readily prevent educators working in schools, academia or the media from finding out details about Government committee discussions of the effectiveness or safety of a whole variety of products. But even in the United States, where there has been a Freedom of Information Act since 1966, there is plenty of evidence that government regulatory agencies resist openness to, and scrutiny by, the public.

Governments in the Western industrialised countries repeatedly claim that such secrecy is needed to protect the commercial competitive interests of industrial manufacturers. The consequence, however, is that educators' ability to educate becomes severely curtailed. The partiality of an educator's knowledge, therefore, has two twists of uncertainty. The first results from the limitations of any individual; the second from structured ignorance. How should an educator tackle this difficulty? The uncertainty involved means that the traditional narrative model of pedagogy, which depends on foundations of certainty, is inappropriate. On the other hand, merely to represent the safety of consuming a food additive such as saccharin or ingesting residues of the pesticide dieldrin as problems about which no-one is certain, conceals as much as it reveals. The next generation needs to be encouraged to consider, not only that great environmental uncertainties lie ahead, but also the kinds of social systems and organisations which are desirable for handling such uncertainties.

It follows that some examination of how current institutions do so is a good introduction and we hope that the 'Deception, Demonstration and Debate' model is helpful in this respect. But in addition, environmental educators will have to face up to the fact that it is not only in Eastern Europe that there has been a highly centralised secret government but that in the West, and especially the UK, publicly open democratic decision-making about environmental issues is the exception rather than the rule - and the rule of secrecy is backed up by laws with severe penalties if broken. If pupils and students are to understand how to make decisions about environment and development issues, then they will need to be able to appreciate not only the partiality of their knowledge but how and why the furthering of their knowledge may be limited by institutional secrecy.

To date educators in the media and, in particular, some newspapers, have been at the forefront of tackling the problem of secrecy and lack of democracy in the West. But newspaper exposes are usually

short-lived and there is the danger that they bypass most people. Notwithstanding the many Government controls on the education system, schooling and higher education with their much more prolonged contact with pupils and students are better placed to provide an understanding of the relationship between environment and development issues, on the one hand, and secrecy and democracy, on the other.

Finally, we would like to draw attention to the possibilities for the media and the education system to complement each other in ways which challenge the constraints felt by educators in the two spheres. The education system could help change the expectations of the next generation in terms of what counts as interesting media coverage. This is important because programmers and journalists consistently refer to ratings (increasingly tied to advertising) as an unchangeable constraint (as illustrated by Greg Philo and Robert Lamb, this volume). Moreover, the Peter Meneer survey (mentioned by Paul Gerhard, this volume) suggests that these constraints may be less real and predictable than is often supposed. Similarly, the mass media could further encourage the education system to break out of the constraints of 19th century subject disciplines because of its interdisciplinary issue-based approach. Also, as Maurice Plaskow and Alan Jenkins have noted in this volume, the use of media within the education system can enrich pedagogy and motivation because of the varieties of presentation and reflection which become available.

Reference

1. Brown, P. (1989) 'Greens accused of blighted vision' *Guardian*, 4 Oct.

E. N. E. D.

Education Network for Environment and Development

The Education Network for Environment and Development (ENED) was established in 1987 at the University of Sussex in response to concern about the speed at which environmental destruction was proceeding and the slowness of society to respond.

The Network recognises not only the major role that education has to play in the search for solutions to problems of environment and development but also the deficiencies of the education system in meeting the challenge of these problems. The Network aims to develop new approaches to learning which enlist the critical response of people within and outside established educational institutions, so that both providers and users of the education system become involved in the debate. Without this openness and willingness to explore the viewpoints of others, efforts to reshape the future may well come to nothing.

The Network brings together academics and practitioners from industry, education, politics, the media and the voluntary sector, so that they can gather inspiration, combine resources and participate more fully and effectively in the public debate on these issues. Anyone interested in the work of the Network or in joining it should contact the Project Team at the following address: Education Network for Environment and Development, Arts E, University of Sussex, Falmer, Brighton, East Sussex BN1 9QN. Tel. (0273) 678449 direct line, or 606755 ext. 4357.

WWF

World Wide Fund for Nature (WWF)

WWF is an international environmental organisation with national groups around the world. Launched in 1961 to raise money for the conservation of nature and natural resources, WWF has so far channelled over one hundred million pounds into projects in over 130 different countries.

WWF United Kingdom is committed to a broadly based education programme which aims to encourage a deeper understanding of the causes and consequences of environmental mismanagement, and which strives to give people the knowledge and experience that enables them to make informed personal judgements about environmental issues. There are five major components to WWF's education programme - teacher resources, teacher education, curriculum influence, rural development and education, and education and society. WWF supports the Education Network project as part of this programme, and has helped to fund Deception, Demonstration and Debate, and its predecessor, Education, Ecology and Development. If you would like further details about the education programme, please write to: WWF United Kingdom, Education Department, Weyside Park, Godalming, Surrey GU7 1XR. Tel (0483) 426444.

S.C.E.R.T., West Bengal
Library
Calcutta
25/3, B. C. Road

DECEPTION DEMONSTRATION AND DEBATE

Toward a critical environment and development education

Edited by John Abraham, Colin Lacey and Roy Williams.

Although the Cold War may be thawing rapidly we still live in a world which has failed to develop in a way that enables its peoples to have enough to eat. Mass hunger is still widespread yet our work is characterised by rapid industrialisation and huge capital accumulation -- processes which now seem to be resulting in adverse environmental effects at the personal, regional and global levels. How are we to extend our understanding of what is happening to our world for ourselves and future generations? Can education become a more effective means to deeper understanding?

This volume brings together perspectives on education, relating to environment and development issues, from a wide range of professional viewpoints; schools, television, universities, polytechnics, research institutes, freelance journalists and consultants, and the ILEA. Despite the wide variety of institutional settings and the broad range of subject matter, from transnational agribusiness to classroom approaches, a number of common themes and concepts emerge. In particular it is revealed that people from this range of institutions are intent on developing new and deeper forms of understanding of environment and development issues. This endeavour can be described as an attempt to develop a 'new intelligence' among a variety of audiences. Citizens need to understand the structure of public debate about the environment and development. They need to appreciate that deceptions are frequently part of this debate and deeply embedded in it.

Attempts to demonstrate such deceptions are often difficult and sometimes hazardous. Moreover, deception, demonstration and debate may take different forms within different institutions. If we are to make informed and intelligent judgements about environment and development issues then we need to begin the process of educating ourselves about these social practices.

ISBN 0 7494 0198 2

£9.95 net

WWF World Wide Fund For Nature

Kogan Page Ltd
120 Pentonville Road
London N1